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MEETING AGENDA
ENVIRONMENTAL PROTECTION COMMISSION
University of Northern Iowa
Gilchirst Hall Board Room
Waterloo, Iowa
June 18-19, 1990

Meeting convenes at 10:30 a.m., June 18, 1990 in the Gilchrist Hall Board Room at University of Northern Iowa, and reconvenes at 8:30 a.m., June 19, at MidAmerica Savings Bank (training room). 999 Home Plaza

Appointments:

Harvey Drewelow, Hanson Tire Service (Tues, June 19)	9:00 a.m.
Ron Moore, 63-I80 Truckstop/Moore Oil Co. (Tues, June 19)	9:30 a.m.
Public Participation - (Tuesday, June 19)	10:00 a.m.
Pete's Sunoco + Car Wash; Popejoy Septic Tank Service	10:15 A.m.

1. Approve Agenda.
2. Approve Minutes of May 21, 1990.
3. Director's Report. (Wilson) Informational.
4. Final Rule--Chapter 101, General Requirements Relating to Solid Waste Disposal. (Hay) Decision.
5. Final Rule--Chapter 118, Removal and Disposal of Polychlorinated Biphenyls (PCB) Capacitors from White Goods. (Hay) Decision.
6. Contract Approval. (Hay) Decision.
7. Iowa's Solid Waste Stream: Characterization and Management Strategies Report. (Hay) Informational.
8. FY 1991 Operations Budget. (Kuhn) Informational.
9. Financial Status Report. (Kuhn) Informational.
10. Monthly Reports. (Stokes) Informational.
11. State Environmental Regulations and Stringency Clause. (Stokes) Informational.
12. Final Rule--Chapter 109, Solid Waste Disposal Fees. (Stokes) Decision.
13. Notice of Intended Action--Chapter 39, Requirements for Properly Plugging Abandoned Wells. (Stokes) Decision.
14. Notice of Intended Action--Chapter 61, Water Quality Standards - Human Health Criteria. (Stokes) Decision.
15. Proposed Rule--Chapter 60, Definitions and Chapter 62, Federal Effluent and Pretreatment Standards. (Stokes) Informational.

16. Proposed Contested Case Decision--Robert Coppinger and Velma Nehman. (Murphy) Decision.

17. Proposed Contested Case Decision--Ruth Ann Coe. (Murphy) Decision.

18. Referrals to the Attorney General. (Combs) Decision.

    (a) Harvey Drewelow and Hanson Tire Service of New Hampton, Inc.
    (b) Pete's Sunoco & Car Wash; Popejoy Septic Tank Service (Des Moines)
    (c) 63-I80 Truckstop/Moore Oil Co. (Malcom)
    (d) Soo Line Railroad (Mason City) - tabled item; withdraw request

19. General Discussion Items.

20. Address Items for Next Meeting.

NEXT MEETING DATES

July 16-17, 1990
August 20-21, 1990 (Sioux City)
September 17-18, 1990

ENVIRONMENTAL PROTECTION COMMISSION

June 18, 1990

NAME	COMPANY OR AGENCY	CITY
George Brenner	University Hygienic Laboratory	Iowa City
Cynthia Hubert	Des Moines Register	DM
Diane Smith	Waterloo Resident	W'loo

Minutes of the Environmental Protection Commission Meeting

June 18-19, 1990

Cedar Falls and Waterloo

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JUNE 1990 COMMISSION MEETING

The meeting of the Environmental Protection Commission was held in Cedar Falls and Waterloo, convening at 10:30 a.m. on June 18, 1990.

MEMBERS PRESENT

Mike Earley, William Ehm, Charlotte Mohr, Margaret Prahl, Nancylee Siebenmann, and Clark Yeager.

MEMBERS ABSENT

Richard Hartsuck, Rozanne King, and Gary Priebe

ADOPTION OF AGENDA

The following appointments were added to the agenda:

Pete's Sunoco & Car Wash - Tuesday, June 19 at 10:15 a.m.
Popejoy Septic Tank Service - Tuesday, June 19 at 10:30 a.m.

Motion was made by Margaret Prahl to approve the agenda as amended. Seconded by William Ehm. Motion carried unanimously.

ADOPTION OF MINUTES

Motion was made by Margaret Prahl to approve the minutes of May 21, 1990 as presented. Seconded by Mike Earley. Motion carried unanimously.

WELCOME

Dr. Constantine Curris, University of Northern Iowa President, welcomed the Environmental Protection Commission to the University. He stated that he was happy the Commission chose to

meet at UNI and he commented on the good work the Commission is doing.

Chairperson Mohr asked Director, Larry Wilson to introduce the speaker scheduled to address the Commission.

Director Wilson stated that he is pleased to have the opportunity to meet at the University of Northern Iowa campus. He noted that in the past three or four years we have really seen some good, productive work in the legislature in creating environmental legislation and working with DNR and the Commission. Additionally, a number of new programs have developed as a result of that; for example, the Waste Management Authority Division of the DNR, and the Groundwater Protection Act which included the creation of the Iowa Waste Reduction Center at UNI. Mr. Wilson introduced John Konefes, Director of the Iowa Waste Reduction Center, and related that Mr. Konefes will give a presentation about the center.

JOHN KONEFES - PRESENTATION (Iowa Waste Reduction Center)

John Konefes stated that the Iowa Waste Management Reduction Center was created in 1987 by the Groundwater Protection Act and located at UNI primarily because there are many other programs on campus that have a lot of potential for interaction. The center was set up to serve small business and industry throughout the state. The mission statement for the center is to assist small businesses in Iowa; to reduce risks to the environment, employees, and the public; to promote the use of alternatives to land disposal of solid and hazardous wastes according to the waste management hierarchy; and to comply with federal, state, and local laws.

Mr. Konefes distributed a brochure and several hand-outs explaining the center and its services along with a summary of their accomplishments to date. He gave an overview of the center's current projects and an evaluation of the center's services. Mr. Konefes provided statistics, by category, covering detailed assistance which has been provided by the center. He noted that the center now publishes a quarterly newsletter and it will be mailed to the EPC Commissioners in the future.

Discussion followed.

DIRECTOR'S REPORT

Larry Wilson, Director, stated that Teresa Hay will give a report on Toxic Clean Up Days and also on a new program underway in which the department is sending experienced engineers out to work with business and industry on waste reduction.

Diredtor Wilson reported that Midwest Tire Recycling has been issued a permit from the department and is now in operation.

Mr. Wilson noted that in the last mailing to the Commission he included some very useful information on underground storage tanks. He urged the Commissioners to keep it for future reference on UST inquiries from the public.

TOXIC CLEAN UP DAYS REPORT

Teresa Hay gave a report on the Spring Toxic Clean Up Days and noted that staff was unhappy with the poor performance of the contractor. There was a very good turnout for the events; visitors at the Ottumwa and Marshalltown sites had a three hour wait.

Clark Yeager commented that he was at the Ottumwa site and the performance of the contractor was very poor and inefficient. He suggested that, in future events, the community be required to have a paint, oil and battery collection day ahead of the normal Toxic Clean Up Days.

Ms. Hay stated that the program is going to be revamped and that is one of the proposals staff is considering.

WASTE REDUCTION PROGRAM REPORT

Ms. Hay reported that site visits will begin this week with the new Waste Reduction Assistance Program. She explained that 12 senior engineers, each with an average of 35-45 years of experience, will conduct on-site visits to some Iowa businesses and industries as to waste reduction opportunities available within their companies. The program is for companies that have 100 or more employees or are large quantity generators. Funding for the program is provided by EPA.

FINAL RULE--CHAPTER 101, GENERAL REQUIREMENTS RELATING TO SOLID WASTE DISPOSAL

Teresa Hay, Division Administrator, Waste Management Authority Division, presented the following item.

The Commission is requested to approve the proposed rule revision relating to requirements of Solid Waste Comprehensive Plans, Part 1.

The purpose of the revision is to implement sections 3, 28, 29, 30, and 31 of H.F. 753, the Waste Volume Reduction and Recycling Act, of the 1989 Iowa Acts. These sections pertain to Comprehensive Plans, Part 1.

An advisory committee meeting was held February 13 to review and comment on the rules. The committee includes representatives from citizen groups, solid waste agencies, council of governments, counties, municipalities, and state government. The main suggestions offered by the committee included revisions on duties of cities and counties, methods for evidence of cooperation, and methods of calculating progress toward meeting state reduction and recycling goals. These and other suggestions offered by the committee have been included in a revised draft.

Notice of Intended Action was published in the April 18, 1990 Iowa Administrative Bulletin as ARC816A. Oral and written comments were received from five persons during the comment period. A public hearing was held in Des Moines on May 8, 1990. There was no attendance at the hearing. The comments concerned changes in wording for greater clarity and accuracy. Changes have been made in a revised draft.

The proposed rule revision:

- Adds a definitions section;
- Defines duties of cities and counties;
- States that comprehensive plans must be submitted in conjunction with all local governments using the sanitary disposal project;
- States volume reduction and recycling goals of 25% by July 1, 1994 and 50% by July 1, 2000;
- Defines a procedure for local governments to provide evidence of cooperation with the plan;
- Describes methods for waste which is received from or disposed of outside the planning area, including out-of-state;
- Provides methods by which the volume reduction and recycling

goals may be measured and achieved;

- Expands the requirements for public education programs and strategies;
- Requires that recycling programs must contain a specific methodology for meeting the state volume reduction and recycling goals, and describes that methodology;
- Specifies how to examine motor oil, lead-acid batteries, white goods, waste tires, and yard waste for existing and potential recyclability;
- States further requirements for methodologies to be used if incineration for energy recovery or volume reduction is an alternative;
- Describes the procedure to be used to examine expected environmental impacts;
- Describes the requirements for plans submitted after the initial plan has been approved.

(Rule is shown on the following 7 pages)

ENVIRONMENTAL PROTECTION COMMISSION [567]
Adopted Rule

Pursuant to Iowa Code 455B.304 and 455D (1989 Iowa Acts, House File 753), the Environmental Protection Commission of the Department of Natural Resources adopts amendments to 567 -- Chapter 100 "Scope of Title - Definitions - Forms - Rules of Practice" and Chapter 101 "General Requirements Relating to Solid Waste Disposal", Iowa Administrative Code.

One purpose of the revision is to implement sections 3, 18, 29, 30, and 31 of House File 753, the Waste Volume Reduction and Recycling Act, of the 1989 Iowa acts. These sections pertain to Solid Waste Comprehensive Plans, Part I. The revision also clarifies existing rules.

Notice of Intended Action was published in the April 18, 1990 Iowa Administrative Bulletin as ARC816A. Oral and written comments were received from five persons during the comment period. A public hearing was held in Des Moines on May 8, 1990. There was no attendance at the hearing.

Changes from the Notice of Intended Action are as follows:

Subrule 101.4 was reworded to avoid confusion with a different use of the word alternative in the rules.

Subrule 101.5(3) was revised to change the word recommendations to implementation plan and schedule, to more accurately state the requirement.

Subrule 101.5(4)c was expanded to state that the waste stream report must include per capita tons per year, as well as total tonnage. Progress toward meeting state volume reduction at recycling goals must use per capita rates.

Subrule 101.5(5)b(1) was revised to add the word participation, to clarify that public input is expected, as well as public education. Because public participation is not optional, the word should was changed to must in the following sentence: "Strategies must include but not be limited to public meetings during the planning and implementation stages and other forms of information dissemination, such as workshops and advertisements.

Subrule 101.5(5)b(7)(a) was amended to correct the name of the Preserves and Ecological Services Bureau.

Subrule 101.5(5)b(7)(b) was amended to correct the name of the Historic Preservation Bureau.

Copies of the rules may be obtained from the Records Section, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand Avenue, Des Moines, Iowa 50319-0034.

In accordance with Iowa Code section 17A.31, notice is hereby given that these rules may have an impact on small businesses.

These rules are intended to implement sections 455B.304 and 455D of the Code of Iowa.

ITEM 1. Amend the caption to Title VIII to read "Solid Waste Management and Disposal."

ITEM 2. Amend rule 100.1(455B) to read as follows:

567--100.1(455B, 455D) Scope of title. The department has jurisdiction over the management, dumping, depositing, and disposal of solid waste by establishing standards for sanitary disposal projects and by regulating the dumping of solid waste through a system of general rules and specific permits. The construction and operation of a sanitary disposal project requires a specific permit from the department.

This chapter provides general definitions applicable to this title and rules of practice, including forms, applicable to the public in the department's administration of the subject matter of this title.

Chapter 101 contains the general requirements relating to solid waste management and disposal. Chapter 102 pertains to the permits which must be obtained in order to construct and operate a sanitary disposal project. Chapter 103 details the plan and operating requirements for all sanitary disposal landfills. Chapter 104 details the requirements for sanitary disposal projects with processing facilities. Chapter 105 sets forth the requirements for the planning and operation of all composting facilities. Chapter 106 pertains to design and operating requirements for recycling operations. Chapter 107 sets forth the rules and regulations pertaining to beverage container deposits and approval of redemption centers. Chapter 108 pertains to the reuse of solid waste. Chapter 109 contains the procedure for the assessment and collection of fees for the disposal of solid waste at landfills, Chapter 110 contains design, construction, and operation standards for solid waste management facilities. Chapter 118 governs removal and disposal of PCBs from white goods. Chapter 119 provides requirements for collection and disposal of waste oil. Title IX, Chapter 120-121 govern land application of sludge and other solid waste.

ITEM 3. Amend 100.2 by amending the definition of "recycling" and by adding definitions for "local governments," "planning area," and "waste reduction," as follows:

567--100.2(455B, 455D)

"Recycling" means the reutilization of natural resources and man-made products any process by which waste, or materials which otherwise become waste, are collected, separated, or processed and reused or returned to use in the form of raw materials or products. Recycling includes but is not limited to the composting of yard waste which has been previously separated from other waste and collected by the sanitary facility, but does not include any form of energy recovery.

"Local governments" means those counties or municipalities using the sanitary disposal project.

"Planning area" means the localities and facilities involved in any aspect of the sanitary disposal project(s) management of waste, including out-of-state localities and facilities, if applicable. A planning area may include one or more sanitary disposal projects.

"Waste reduction" means practices which reduce, avoid, or eliminate both the generation of solid waste and the use of toxic materials so as to reduce risks to health and the environment and to avoid, reduce or eliminate the generation of wastes or environmental pollution at the source and not merely achieved by shifting a waste output or waste stream from one environmental medium to another environmental medium. Waste reduction includes but is not limited to home yard waste composting, which prevents yard waste from entering the waste stream.

ITEM 4. Amend the title of Chapter 101 to read, "General Requirements Relating to Solid Waste Management and Disposal".

ITEM 5. Amend 101.1(455B) as follows:

567--101.1(455B, 455D). Compliance. All solid waste shall be stored, collected, transported, utilized, processed, reclaimed or disposed of in a manner consistent with requirements of these rules chapters 100-129.

ITEM 6. Adopt a new rule 101.4 as follows and renumber current rules 101.4 through 101.6 accordingly.

567--101.4(455B, 455D) Duties of cities and counties. Every city and county of this state shall provide for the establishment and operation of a

comprehensive solid waste reduction program consistent with the waste management hierarchy under subrule 101.5(5)"a", and a sanitary disposal project for final disposal of solid waste by its residents. Comprehensive programs and sanitary disposal projects may be established separately or through cooperative efforts, including 28E agreements and interstate efforts, for the joint use of participating public agencies as provided by law.

All cities and counties or 28E agencies (Code of Iowa Ch. 28) representing cities and counties shall file with the director a comprehensive plan detailing the method by which the city or county or 28E agency will comply with the requirements to establish and implement a comprehensive solid waste reduction program for its residents. If the city or county or 28E agency does not participate in the preparation of a regional comprehensive plan, then the city or county or 28E agency must file a comprehensive plan separately.

If a city or county facility refuses any particular solid waste type, with the exception of special waste authorizations, it must identify another waste management facility for that waste within that planning area. If no other waste management facility for the waste type exists within the planning area, the city or county must establish one or arrange by contract to establish access to one.

ITEM 7. Amend renumbered rule 101.5 as follows:

567--101.45(455B, 455D) Comprehensive plans. Cities, counties and private agencies operating or planning to operate a sanitary disposal project after July 1, 1988 shall, in conjunction with all local governments using the sanitary disposal project, file with the director either prior to or at the time of application for issuance, renewal or reissuance of a sanitary disposal project permit, a comprehensive plan. At a minimum, the plan shall be updated and refiled with the department ~~every three years or~~ at the time of each subsequent application for issuance, renewal, or reissuance of a sanitary disposal project permit. The department may require filing and updating a plan at other times. The department shall act to coordinate and expedite planning activities for multicounty areas where feasible.

101.5(1) Comprehensive planning ~~goal~~ purpose. The ~~goal~~ purpose of a comprehensive plan submitted according to 101.5(2), ~~and (3)~~ (5), (6) and (7) is the development of a specific plan and schedule for implementing technically and economically feasible solid waste management methods that will prevent or minimize adverse environmental impacts.

101.5(2) State volume reduction and recycling goals. The goal of the comprehensive plan of each planning area of the state is to reduce the amount of materials in the waste stream, existing as of July 1, 1988, twenty-five percent by July 1, 1994, and fifty percent by July 1, 2000, through the practice of waste volume reduction at the source and through recycling.

101.5(3) Evidence of cooperation. When a comprehensive plan is submitted to the department, it must be accompanied by a letter or letters from all local governments using or planning to use the sanitary disposal project. The letter shall include a statement that the governmental body has reviewed the plan and will adopt the implementation plan and schedule contained in the plan. The letter shall briefly summarize the implementation plan and schedule.

If a local government included in the planning area refuses to provide a letter, then that local government must prepare its own plan and is no longer considered to be in the original planning area. In such cases, the

original plan may still be approved, but it must include a brief addendum stating the effect of the change on the waste stream.

101.5(2)(4) Content of a comprehensive plan. In fulfillment of the requirements of Iowa Code section 455B.306(3), and 455B.301A, and 455D a comprehensive plan or revision to a comprehensive plan shall include the following information:

a. A description of the planning area and the public and private agencies involved, including a description of each agency's role in managing solid waste generated in the area.

Prior to waste being received from, disposed of, or otherwise managed on an ongoing basis outside of the delineated planning area, an amendment to the plan is required before the waste may be managed. All out-of-state localities that use permitted facilities in any Iowa planning area are subject to the same comprehensive planning rules (IAC Ch. 101) as Iowa localities.

b. A description of past local and regional planning activities,

c. A report of the waste stream as of July 1, 1988 in total tons per year and in per capita tons per year. The information may be based on tonnage figures as reported in surcharge tax reports, plus any incinerated waste. This baseline data will be used to demonstrate progress toward meeting the state volume reduction and recycling goals pursuant to section 101.5(2). Changes in population, employment, or industrial production shall not be used to demonstrate progress or to justify lack of progress toward meeting state volume reduction and recycling goals. Any such changes shall be documented in the plan.

ed. A description of the current and projected 20 year waste composition and waste generation rates, including a listing of industrial and commercial generators in the area.

de. A description of the existing waste management system, its capacity, disposal costs per ton, and projected 20-year disposal costs, and any financial assurance that may be required by the department, pursuant to Iowa Code 455B.304.

ef. An analysis of alternative waste management systems according to the state's waste management hierarchy,

fg. A description of the proposed waste management system for the planning area based upon the results of the alternatives analysis,

gh. ~~In the case of a sanitary landfill,~~ A specific plan and schedule for fully implementing the comprehensive plan no later than July 1, 1997, and

hi. A description of the methods of financing to be used.

A guidance document describing in more detail the content of a comprehensive plan, part I, is available from the records center of the department at 515/281-8860. The document title is "Guidelines for Solid Waste Comprehensive Plans, Part I: Waste Management Alternatives." July 1, ~~1988~~ 1990.

101.5(3)(5) Alternatives analysis.

a. Alternative solid waste management systems shall be evaluated according to the following waste management hierarchy, listed in descending order of preference:

(1) Volume reduction at the source,
(2) Recycling and reuse,
(3) Combustion with energy recovery,
(4) Combustion for volume reduction,
(5) Landfilling.

b. A complete analysis of alternatives shall include at a minimum:

(1) ~~The development of or participation in a public education program to reduce the volume of solid waste generated by residents, farms, businesses and industries;~~ A detailed description of a public participation and education program for source reduction and recycling by residences, farms, businesses, and industries. The Waste Management Authority Division of the Iowa Department of Natural Resources may be contacted for assistance with public education strategies and materials. The public education program must address, at a minimum, household hazardous materials, tires, motor oil, lead-acid batteries, backyard composting, and methods of materials separation and recycling. Public education strategies, estimated costs, and materials must be described fully in the plan. Strategies must include but not be limited to public meetings during the planning and implementation stages and other forms of information dissemination, such as workshops and advertisements. Timelines and a budget for public education activities must be included in the plan.

(2) Details of a local recycling program which shall contain a specific methodology for meeting the state volume reduction and recycling goals pursuant to 101.5(2), and a methodology for implementing a program of separation of wastes including but not limited to glass, plastic, paper, and metal. The methodologies must include but not be limited to:

(A) Public education strategies

(B) Public education materials

(C) A specific description of recycling activities already in place, including the names of groups conducting the activities;

(D) The names of any local groups that will be involved in any recycling programs in the planning area;

(E) Letters from those local groups stating the nature of their present or planned involvement in the recycling program(s) described in the plan;

(F) Identification of possible markets and estimated prices for each material, including but not limited to glass, plastic, paper, and metal.

(G) A detailed timeline which identifies yearly waste reduction and recycling goals and milestones for each phase of the program(s): Planning, implementation, and evaluation.

(23) An examination of the following waste items for their existing and potential recyclability, including an identification of available markets: motor oil, waste tires, ~~car~~ lead-acid batteries, ~~nickel-chrome-and-mercury~~ household batteries, plastics, newspapers, corrugated cardboard, textiles, office paper, construction materials, aluminum and steel cans, colored and clear glass, yard ~~clippings~~ waste, animal wastes and other organic wastes, and white goods.

(A) For motor oil, the examination shall also include:

Specific locations of collection sites in the planning area, for those who change their own oil. If no sites exist within the planning area, the plan must identify the nearest collection site(s) to the planning area.

A description of public education strategies.

Other requirements as specified in Chapter 119.

(B) For lead-acid batteries, the examination shall also include a description of public education strategies, as detailed in 101.5(5)b(1).

(C) For white goods, the examination shall also include a methodology for recycling the metal they contain. If capacitors are removed from white goods at a sanitary disposal project, the materials must be handled in accordance with Chapter 118.

(D) For waste tires, the examination shall also include:

The number and geographic distribution of waste tires generated and existing in the planning area, including identification of stockpiles containing over 1,000 waste tires.

The identification of any management methods for waste tires in the planning area.

If a sanitary disposal project in the planning area accepts tires, then the plan must include a methodology for processing the tires in a manner established by the department.

(34) ~~Consideration of an organic municipal waste composting program either at the source or at a central processing facility (at a minimum this program should include yard waste composting);~~ Detailed descriptions of programs developed to encourage backyard composting of yard waste, to investigate the feasibility of central composting facilities that will, at a minimum, include yard waste composting, and to investigate the use of land application of yard waste or the use of yard waste as a soil conditioning material. These programs must include public education elements as detailed in subrule 101.5(5)b(2) and identification of markets or outlets for any compost generated at a central composting facility. In addition, any compost generated at a centralized facility must be produced in accordance with standards established by the department.

(45) Investigation of market potential for energy recovery from waste incineration~~, including the implementation of waste reduction, reuse and recycling prior to combustion~~; If incineration for energy recovery or volume reduction is an alternative, then the plan must include methodologies for the separation of recyclable and reusable materials, materials which result in uncontrolled toxic or hazardous air emissions when burned, and hazardous or toxic materials which are not rendered nonhazardous or nontoxic by incineration. Separation of waste includes, but is not limited to, magnetic separation. The removed materials shall be recycled, reused or treated and disposed in a manner that is consistent with the waste management hierarchy as described in subrule 101.5(5).

(56) Description of expected environmental impacts from the alternative waste management systems including any negative impacts on water, groundwater, air quality, plant life, animal life, and human health~~;~~.

(7) All new sanitary landfills or expansions that require a new permit or a permit amendment shall include:

(a) A comprehensive listing of plant and animal species. In preparing the listing the permit applicant shall contact the department's Preserves and Ecological Services Bureau with a request to search its records to determine the presence of or habitat for any threatened or endangered species or communities and any forests, prairies or wetlands. In the event that the department's Preserves and Ecological Services Bureau does not contain records of rare species or community but their presence is suspected, the permit applicant may be required to conduct an approved site survey.

(b) A determination of the presence of and assessment of the impact on any archeological, historical, or architecturally significant properties on the proposed site. To assess the impact, the permit applicant must consult with the Historic Preservation Bureau of the Iowa State Historical Society.

(c) An assurance that soil boring samples have been taken at the site. The soil boring samples must be kept by the permit applicant until the permit is issued and must be made available to the department if the department requests them.

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(68) Inclusion of established and anticipated regulatory requirements regarding the future siting, operation, closure and post closure of solid waste facilities, and

(79) Completion of the cost analysis worksheets contained in the "Guidelines For Solid Waste Comprehensive Plans, Part I: Waste Management Alternatives." This document is available upon request from the department. Refer to "Guidelines for Solid Waste Comprehensive Plans, Part I: Waste Management Alternatives: for the comprehensive planning requirements that apply to composting, recycling, processing, and medical waste incineration facilities. Because these operations are specialized, some requirements contained in these rules may not apply to these operations.

101.5(4)(6) Plan review. A plan submitted according to 101.5(2) and (3) shall be reviewed by the department for its accuracy, completeness, and appropriateness of baseline data and alternatives analysis, for the environmental and economic feasibility of selected waste management systems, for the plan's adherence to the state's waste management hierarchy, for compliance with statutory deadlines, and for the agency's commitment to public education and adequate financing. The director may reject, suggest modification, or approve a plan based upon these criteria.

101.5(7) Subsequent plans. After the initial plan has been approved, all subsequent plans must include all elements in 101.5 and a thorough evaluation of progress toward meeting the state volume reduction and recycling goals as detailed in subrule 101.5(2). The Solid Waste Abatement Table included in the "Guidelines for Solid Waste Comprehensive Plans, Part I: Waste Management Alternatives" shall be used for this evaluation of progress. If a new facility requests to be included in a planning area after completion of a plan but before a subsequent plan is due, and the planning area agrees to include the facility, the following procedure is required:

(a) A letter is submitted to the department by the facility operator describing the facility's operation and the amount of waste to be managed.

(b) A letter is submitted to the department by the planning area's responsible agency agreeing to accept the facility in its planning area and stating how the facility will affect the planning area's waste stream.

(c) The subsequent plan submitted by the planning area will include the facility.

ITEM 8. Amend renumbered subrule 101.6(2) as follows:

101.57(2) All public agencies which contract with a hauler to comply with the requirements of part 1 of division IV of chapter 455B shall include as terms of that contract that all solid waste collected by the hauler for that agency shall be disposed or deposited at a sanitary disposal project permitted by the department, or otherwise managed in accordance with the rules of the department.

_____

Date

_____

Larry J. Wilson, Director

Ms. Hay gave a brief explanation of the rule.

Motion was made by William Ehm to approve Final Rule--Chapter 101, General Requirements Relating to Solid Waste Disposal. Seconded by Nancylee Siebenmann. Motion carried unanimously.

FINAL RULE--CHAPTER 118, REMOVAL AND DISPOSAL OF POLYCHLORINATED BIPHENYLS (PCB) CAPACITORS FROM WHITE GOODS

Teresa Hay, Division Administrator, Waste Management Authority Division, presented the following item. Biphenyls (PCB) Capacitors from White Goods Capacitors, Final Rule--Chapter 118 Teresa Hay, Division Administrator, Waste Management Authority Division, presented the following item.

The Commission is requested to adopt new rules on the removal and disposal of Polychlorinated Biphenyl (PCB) capacitors from white goods. The purpose of these rules is to implement 455B.304 and 455D.6(6) (House File 753). A brief summary of this chapter follows:

- Registration: Facilities will be required to register with the department of natural resources if they will be removing capacitors from white goods.
- Exemptions: Certain facilities may be exempt from this registration requirement.
- Site Requirements: Facilities must comply with requirements for worker safety, education, signage, and emergency procedures.
- All capacitors must be removed from all white goods before the white good can be processed.
- Disposal of Capacitors: All capacitors must be disposed of at an EPA approved hazardous waste facility.

Notice of Intended Action was published February 7, 1990 in the Iowa Administrative Bulletin as ARC 657A. Oral and written comments were received from thirteen (13) persons during the comment period and at three (3) public hearings.

There was a delay between the Notice of Intended Action and this request for adoption. Confusion arose when information from EPA was received that indicated a possible conflict between this chapter and federal PCB regulations. Written clarification was requested from EPA and those clarifications are reflected in some of the changes from the Notice of Intended Action.

The following changes were made as a result of public comment:
"Window unit air conditioners" was added to the list of appliances included in the definition of white goods.
Subrule 118.3(1)b was expanded to be more specific about the standards with which removal and storage facilities must comply.

Subrule 118.3(1)c was expanded to include a record keeping requirement to ensure that those claiming an exemption do so in accordance with this rule.

Subrule 118.3(2)b was expanded to allow information from manufacturers to be used as proof that a particular model white good does not contain PCB capacitors.

Subrule 118.3(3)a modifies the type of storage container from "55-gallon" to "DOT approved". Also, the requirement that all interstitial space be filled with absorbent material is changed to allow 2 inches of absorbent material in the bottom of the container.

The following changes were made as a result of clarification of federal regulations:

A new definition of "small capacitors" was added to clarify the type and size capacitors that are being regulated by this chapter.

Subrule 118.3(1)c was changed to add an exemption from registration for those facilities that are already required to register with EPA under federal rules.

Subrules 118.3(3)d and f were amended to refer to federal regulations where appropriate.

(Rule is shown on the following 3 1/2 pages)

ENVIRONMENTAL PROTECTION COMMISSION [567]
Adopted Rule

Pursuant to the authority of Iowa Code section 455B.304 and 455D.6(6) (Iowa Code Supplement), the Environmental Protection Commission of the Department of Natural Resources intends to adopt new Chapter 118, "Removal and Disposal of Polychlorinated Biphenyls from White Goods Prior to Processing," Iowa Administrative Code.

These rules pertain to the environmentally safe removal and disposal of electrical parts of white goods which contain polychlorinated biphenyls prior to any processing or metals recovery.

Notice of Intended Action was published in the February 7, 1990, Iowa Administrative Bulletin as ARC 657A. Oral and written comments were received from thirteen persons during the comment period and at three public hearings. Confusion arose when information from EPA was received that indicated a possible conflict between this chapter and federal PCB regulations. Written clarification was requested from EPA and those clarifications are reflected in some of the changes from the Notice of Intended Action.

Changes from the Notice of Intended Action are as follows:

A new definition of "small capacitors" was added to clarify the type and size capacitors that are being regulated by this chapter.

The definition of white goods was changed to include window unit air conditioners.

Subrule 118.3(1)b was expanded to be more specific about the standards with which removal and storage sites must comply.

Subrule 118.3(1)c was expanded to include a record keeping requirement to ensure that those who claim an exemption do so in accordance with this rule. Exemption to registration was extended to those who are already subject to Federal EPA registration under 40 CFR 761.

Subrule 118.3(2)(b) was expanded to allow information from manufacturers to be used as proof that a particular model white good does not contain PCB capacitors.

Subrule 118.3(3)a modifies the type of container required from "55-gallon" to "DOT approved." Also the requirement that all interstitial space be filled with absorbent material is changed to allow 2 inches of absorbent material in the bottom of the container.

Subrules 118.3(3)"d" and "e" were amended to reflect federal regulations on storage, disposal and transport of PCB and PCB articles.

In accordance with Iowa Code section 17A.31, notice is hereby given that these rules may have an impact on small businesses.

These rules are intended to implement Iowa Code section 455B.304 and 455D.6, 1989 Iowa Acts, House File 753.

ITEM 1. Adopt the new Chapter 118.

Proposed Rules on Removal and Disposal of Polychlorinated Biphenyls (PCBs) from White Goods Prior to Processing

567--118.1(455B and 455D) Purpose. The purpose of this rule is to implement Iowa Code section 455B.304 and 455D.6(6) by providing rules for the proper removal and disposal of electrical parts containing polychlorinated biphenyls from white goods prior to processing.

567--118.2(455B and 455D) Definitions.

"Capacitor" means a device for accumulating and holding a charge of electricity and consisting of conducting surfaces separated by a dielectric.

"Facility" refers to any permitted sanitary disposal project, salvage dealer, shredder operation or other party which may accept white goods for disposal or processing.

"Fluff" is the residual waste from the shredding operation after metals recovery.

"PCB" and "PCBs" mean any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contains such substance.

"Processing" means crushing, compacting, smashing, shredding, or other similar action.

"Small capacitor" means a capacitor which contains less than 1.36 kg (3 lbs.) of dielectric fluid. The following assumptions may be used if the actual weight of the fluid is unknown. A capacitor whose volume is less than 1,639 cubic centimeters (100 cubic inches) may be considered to contain less than 1.36 kg (3 lbs.) of dielectric fluid. A capacitor whose volume is between 1,639 and 3,278 cubic centimeters may be considered to contain less than 1.36 kg (3 lbs.) of dielectric fluid if the total weight of the capacitor is less than 4.08 kg (9 lbs.).

"White goods" means appliances including, but not limited to, refrigerators, freezers, window unit air conditioners, central heating/air conditioning units, washers, dryers, and microwave ovens.

567--118.3(455B and 455D) Removal and disposal requirements.

118.3(1) Registration of capacitor removal and storage facility.

a. Any facility that is now or plans to be engaged in the removal of PCB capacitors from white goods must register by submitting a written description of the removal and storage site to the department of natural resources which will maintain that list and provide copies to interested parties upon request.

b. The removal and storage site must comply with 40 CFR 761.65 if capacitors, other than small capacitors are stored. If only small capacitors are to be stored at the facility the following is required:

(1) Signs must be posted warning workers of the hazards associated with PCBs and the proper first aid measures in the event of contact with skin or eyes.

(2) Personal protective equipment including protective clothing, eye protection and respirators must be made available to all workers who will be handling PCB capacitors.

(3) Employers must maintain all personal protective equipment to ensure that they will be in proper working order when needing.

(4) Education of all personnel must include information on emergency procedures in the event of a spill; instruction on the handling of leaks and spills; decontamination procedures; fire fighting equipment location and use; first aid procedures, equipment and use; instruction on the odor properties of PCBs that will help workers detect unseen leaks or spills; and instruction to all personnel coming in contact with capacitors or PCB fluids about proper sanitation, that is washing hands and exposed skin before eating, drinking, smoking or using toilet facilities during the work shift.

(5) Emergency procedures must include evacuation of all non-essential personnel from the area of any leaks or spills and adequate ventilation of the area to prevent the accumulation of fumes.

c. Exemptions. Any facility that is subject to Federal PCB identification requirements is exempt from further registration with the state of Iowa. Any person or facility that removes less than 200 pounds of small capacitors in one month, but no more than 500 pounds in one year, is exempt from the registration requirement but is not exempt from the remaining regulations on removal and disposal of capacitors, handling of spills or shredding of white goods. The person or facility is required to keep records of the amount, in pounds, of capacitors removed each month and each year. These records are to be made available to the Department upon request. These records are to be maintained for at least 3 years.

d. Permitted sanitary disposal projects must comply with permit conditions pertaining to activities governed by this chapter.

118.3(2) Removal of capacitors.

a. All white goods must be inspected for the presence of capacitors.

b. All capacitors are assumed to contain PCBs unless proven otherwise by an approved laboratory, unless the words "No PCBs" has been imprinted on the body of the capacitor by the manufacturer, or if the manufacturer certifies in writing that no PCBs were used in the manufacture of the white good or capacitor.

c. All capacitors must be removed from all white goods prior to processing and disposed of in accordance with subrule 118.3(3) with the exception of any capacitor which is proven not to contain PCBs that may be disposed of as any other non-hazardous solid waste.

118.3(3) Disposal of capacitors.

a. All capacitors must be placed in DOT approved containers which show no signs of damage. The bottom of the container must be filled to a depth of 2 inches with absorbent material (soil, sand, oil-dry, kitty litter, etc.).

b. All containers must be labeled with the proper EPA-approved PCB label, in both English and the predominant language of non-English reading workers.

c. All containers must be sealed prior to shipment.

d. Small capacitors may be stored for up to one year on site in DOT approved containers provided that: the containers show no signs of rust, cracking or dents; the containers are properly labeled with EPA PCB label; the storage area is separated and delineated from any other non-hazardous storage area; and the capacitors show no sign of cracks or leaks (cracks or leaks are treated as spills). Other capacitors must be stored in accordance with 40 CFR 761.65.

e. All capacitors must be transported to and disposed of at a waste disposal facility approved by the EPA for PCBs.

f. Sealed containers of small capacitors may be transported by the owner or by a EPA approved PCB transporter, in accordance with 40 CFR 761 subpart K.

118.3(4) Spills. Any spills from leaking or cracked capacitors must be handled by placing the capacitor and any contaminated rags, clothing, and soil into a container for immediate shipment to an EPA-approved waste disposal facility. In the event of a spill, the facility which handles, stores or transports the PCB-contaminated materials must notify the Department of Natural Resources (515/2818694), and the local police department or the office

of the affected county of occurrence of a hazardous condition as soon as possible, but no later than six hours after the onset or discovery of a spill.

118.3(5) Shredding of white goods. Fluff from the shredding of white goods must be sampled quarterly for the presence of PCBs. If the fluff contains less than 50ppm PCB, it may be landfilled at a permitted landfill under a Special Waste Authorization (SWA) from the Department of Natural Resources. If the fluff contains levels of contamination 50ppm or higher, it must be treated in a manner in accordance with 40 CFR 761.125 on disposal of free-flowing PCBs.

_____
Date

_____
Larry J. Wilson, Director

Ms. Hay explained the rule and changes made as a result of public comment.

Motion was made by Margaret Prahl to approve Final Rule--Chapter 118, Removal and Disposal of Polychlorinated Biphenyls (PCB) Capacitors from White Goods. Seconded by William Ehm. Motion carried unanimously.

CONTRACT APPROVAL

Teresa Hay, Division Administrator, Waste Management Authority Division, presented the following item.

Funding support was sought from the U.S. EPA by the department for Iowa State University's Department of Industrial Engineering to develop and implement a communication network for marketing solid waste recyclable materials. The attached proposal was submitted to EPA via the Waste Management Division and the department received $99,655 funding for the project in May.

This grant is 100% federally funded and the department has no significant role in carrying out the project except to pass the money on to Iowa State and see that proper accounting procedures are followed.

Commission approval is requested for a contract with Iowa State in the amount of $99,655 to carry out the work as detailed in the grant proposal.

A Proposal Submitted to

Iowa Department of Natural Resources
Waste Management
Authority Division

Development, Demonstration, Documentation and Implementation of a Communication Network for Marketing Recyclable Materials from Solid Waste

S. Keith Adams and John C. Even, Jr., (Principal Investigators)
Department of Industrial Engineering
205 Engineering Annex
Iowa State University
Ames, IA 50011

Phone: 294-5065 (Adams)
294-4056 (Key contact: Even)
294-1682 (Dept.)

Amount Requested: 1/1/90-12/31/90	Proposed (DNR)	ISU Cost Sharing
	$99,655	$49,275

Endorsements:

S. Keith Adams, Associate Professor
Department of Industrial Engineering

Richard E. Hasbrook 10-5-89
Contracts and Grants Officer
515/294-5225

John C. Even, Jr., Professor
Department of Industrial Engineering

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Abstract

This one-year project consists of the development, demonstration, documentation and implementation of a regionalized marketing and transportation system data base, communication network, and planning model for recycling materials (plastics, glass, ferrous metal, tires, batteries, waste oil and paper) from municipal and industrial solid waste. A demonstration project and implementation involving a multi-county region is included. This will serve as the basis for documenting the full-scale project covering selected states in EPA Regions V, VII and VIII.

Activities during the first year include:

(a) A survey to be conducted of secondary material recycling businesses listed in the recycling directories of Iowa, Minnesota, South Dakota, Nebraska, Kansas, Missouri, Illinois and Wisconsin which accept plastics, glass, ferrous metal, tires, batteries, waste oil and paper. This will determine the types, quantity, quality, condition (baled, crushed, shredded, etc.), price paid as a function of quality, access by truck and rail, seasonal variations, price fluctuations, storage capability and type of user (final product manufacturer, intermediate product manufacturer, shipper/broker).

(b) Completion and documentation of a basic rail and truck transportation model showing the costs of shipping the selected secondary materials by rail or truck to major marketing locations determined in (a). This will permit duplication of the system methodology in other states.

(c) Data base development consisting of structuring information derived in (a) and (b) such that transportation cost can be referenced to different locations in Iowa (or other states if data is available) and the best markets can be utilized.

(d) Initial formulation, structuring and documentation of a computer model designed to be indexed to various multi-county regions in Iowa enabling marketing and transportation decisions to be made on a weekly or daily updated basis.

(e) Using the City of Ames Resource Recovery System for debugging software and procedures, installation of a telephone modem to interface between the city's microcomputer and the data base stored in the Zenith 386 microcomputer located at Iowa State University. The Zenith 386 microcomputer will also have voice interface (DECTALK) so that material buyers and transporters can use touchtone telephones to enter their pricing information. Since the City of Ames facility is an RDF production plant, only ferrous metal, tires, batteries and waste oil will be marketed from Ames.

(f) Implementation of the network and information system for the Southeast region in Iowa, based in Fort Madison with Mr. Ron Mace serving as manager.

A second year is envisioned during which the overall model will be completed and tested using the location of markets and feasible transportation alternatives together with prices and costs to generate optimum (lowest net cost) choices. Application to the Northwest regions of Iowa, with Mr. Dave Honkomp, manager would be made at that time.

Direct results of the project include:

(a) An on-line computer based data management system with documentation providing current market information to Iowa recyclers and users of the selected recycled materials. This will constitute a board of trade for secondary materials.

(b) An information network on selected recycled material availability, shipping costs and alternatives regarding product quantity and container specifications (e.g. Gaylord boxes of crushed glass vs. bulk truck loads, whole tin cans vs. shredded cans, loose vs. baled metal or plastic).

(c) A menu-driven computer model to assist regional waste managers in decision making, permitting the most cost effective or least total cost combinations of alternatives for marketing and shipping the selected materials from a given region or municipality.

(d) Enhancement of market development for the selected secondary materials.

(e) Price stabilization, elimination of unnecessary bargaining and encouragement of efficiency in transporting and handling the selected secondary materials.

(f) Use of an "electronic bulletin board" by all organizations involved in recycling, providing accurate, current supply, demand, and pricing information along with transportation options.

(g) Identification of market voids where secondary material users need to be located to serve given areas.

(h) (Second year) - Development of growth plans for the evolution from a regional to a national communication system ultimately providing a national board of trade for secondary materials.

NARRATIVE

A. Introductory Statement

This project consists of the development, demonstration, documentation and implementation of an information system for collecting, processing, transporting and marketing recyclable materials from municipal and industrial solid waste on a regional basis throughout the state of Iowa. The market area is considered to include the border states of Illinois, Wisconsin, Minnesota, South Dakota, Nebraska, Kansas and Missouri as well as Iowa. The proposed information system will enable multi-county regions and metropolitan areas in Iowa to coordinate the recovery, processing, transportation and marketing of recyclable materials (plastics, glass, ferrous metal, paper, tires, batteries and waste oil) using a network system of microcomputers. The microcomputers equipped with modems will be connected via telephone line and will include buyers, sellers and transporters of secondary materials. Market bid prices for selected materials (baled, cleaned steel cans, color sorted crushed glass, etc.) at given locations, and quantities desired on a daily updated basis as well as transportation costs (truck, rail, barge) on a monthly updated basis will be available from a central data bank. A selected multi-county region (Southeast) will be used in developing, demonstrating and implementing the plan designed to be applied ultimately to the entire state of Iowa, and to serve as a demonstration model for other states and regions.

Objectives stated in "The Solid Waste Dilemma: An Agenda for Action" published by the U.S. Environmental Protection Agency (Feb. 1989) include the following (p. 24):

"Increase effective planning by waste handlers, local communities and states."

"Increase recycling by government and by individual and corporate citizens."

Integrated waste management strategies listed in a subsequent section (p. 37) include:

"Market development plans for secondary materials, including intermediate markets (brokers, scrap dealers and processors), final markets (manufacturers), and the use of existing networks of secondary materials dealers."

This proposal addresses these issues directly in ways that encourage the development of free enterprise solutions and natural incentives to reduce the net volume of post consumer and industrial solid waste. It has particular value in that it involves the creation of new networks through improved rapid communication between material buyers and sellers, resulting in a board of trade.

Results of Using the Database/Advantages to Buyers and Sellers

An operational database for secondary materials will offer several important advantages to buyers and sellers. For each class of materials, the availability of a database should enhance market development by providing accurate, current market information allowing buyers and sellers to take advantage of opportunities on a day-by-day basis.

In addition, pricing will be more competitive, encouraging economies of scale and efficiency in the preparation, transportation and overall handling of recycled materials. Because of common knowledge available to all buyers and their ability to enter new prices, price stabilization should result. This will reduce the haggling and curbside negotiating that is often typical in the recycled materials markets. These will all be replaced with what might be called an "electronic bulletin board" with

the date and time of each new entry posted along with price/quantity data.

Transporters should also benefit from the use of a database since this defines the overall demand and movement pattern for each class of material and also allows them to consider economies of scale, irregularities in demand, and potential for more profitable routing and scheduling.

For example, a trucker may be able to offer a preferred rate to supply several buyers in the same area and benefit from hauling a full load even though no one buyer needs this much of a given material. Or, given sufficient demand for a given item, several cooperating regions or municipalities may be able to utilize rail shipment to a buyer who will take large quantities but is distant enough to discourage trucking.

Direct results of the project include:

(a) An on-line computer based data management system providing current market information to Iowa recyclers and users of recycled materials. Materials selected for this project include plastics, glass, ferrous metals, paper, tires, batteries and waste oil.

(b) An information network on recycled material availability, shipping costs and alternatives regarding product quantity and container specifications (e.g. Gaylord boxes of crushed glass vs. bulk truck loads, whole tin cans vs. shredded cans, loose vs. baled metal or plastic).

(c) A menu-driven computer model to assist regional waste managers in decision making, permitting the most cost effective or least total cost combinations of alternatives for marketing and shipping these recyclable materials from a given region or municipality.

(d) An aid to corporate planners interested in locating new market areas for secondary material users.

Benefits to the State of Iowa from this project include:

(a) A significant reduction in landfilling.

(b) Flexible, low cost recycling strategies.

(c) Methodology for extended application throughout the State of Iowa and surrounding regions throughout the upper midwest.

(d) Compatibility with alternative approaches including refuse derived fuel production and energy recovery programs.

(e) Public participation at the local level.

B. Previous Research on Recycling in Iowa

The proposed project is based upon information and experience obtained during the recent DNR-funded study which began in April of 1988 and was completed in June of 1989. (See Addendum A). This project was based on the experience of the City of Ames Solid Waste Recovery System involving the derivation of refuse derived fuel (RDF) that is co-fired with coal for generating electricity for the City of Ames; the system separates ferrous metal and other materials. The original intent of that project was to extend this concept by determining regions of economic feasibility for this alternative. During the course of the study, it became apparent that curbside collection and recycling of specific materials was more attractive economically and that it can have a greater impact on reducing the quantity of waste to be landfilled. This conclusion was reached following numerous site visits, interviews and a collection of other engineering and economic data from contacts in other states as well as Iowa. It was also found that the most effective recycling plans are based on natural economic incentives and the operation of a free market system involving balances between supply and demand. Based on these two important observations, it was determined that:

1. Emphasis should be placed on recycling of specific prepared materials rather than on fuel production and energy derivation.

2. Accurate knowledge of markets and transportation costs is vital to the success of any material recycling program including refuse derived fuel production.

3. Each material will have its own economic marketing and transportation profile.

4. A data base, economic decision planning model and participative network will be needed to create a workable recycling plan for each region of the state.

C. Proposed Activities

The proposed project will be carried out over a one year period. Activities will include (a) acquiring and organizing information regarding the quantification of market and transportation data for the selected recyclable materials, (b) establishment of data bases, (c) design of marketing decision models and (d) the design and installation of a user friendly data network linking material sources (regions, municipalities, industrial firms, institutions), transporters and buyers using IBM PC compatible microcomputers and modems operating over existing telephone lines.

Activities will be coordinated with the Waste Management Authority Division of the Iowa Department of Natural Resources. In particular, studies will be researched jointly in the recycling of tires, lead-acid batteries and waste oil.

Activities are described as follows:

1. (a) Construction of an overall regional (Iowa and seven surrounding states) market demand and potential revenue profile for plastics, glass, ferrous metals, paper, tires, batteries and waste oil.

   (b) Information obtained from surveying all businesses which buy these recycled materials will include for each business location:

1. Type of material desired
2. Quantity needed
3. Quality requirements and levels or grades
4. Price paid per quality level or grade
5. State (condition) required (baled, crushed, shredded, loose, etc.)
6. Access to business location by truck (highway), rail (specific line) or barge.
7. Seasonal variations in demand for past 5 years or longer
8. Price fluctuations over past 5 years or longer
9. Storage capacity at or near business location
10. Type of user of secondary materials:

    (a) End user who manufactures a product
    (b) Manufacturer of an intermediate product
    (c) Shipper/broker

2. A data base will be developed from information obtained or derived in step 1. This will permit the use of market location information for each secondary material together with the economics of its transportation for each region or major population center in the State of Iowa. Use of the data base will permit the best markets to be selected first.

3. Initial formulation and structuring of a computerized model for selecting optimum decisions utilizing information represented in the data base in step 2. This model will permit sensitivity analysis to be performed considering changes in major costs and will also permit optimum decisions to be updated on a weekly (and possibly daily) basis, reflecting current market prices and transportation costs.

4. Installation and debugging of a sample regional recycling system based at the City of Ames Resource Recovery Plant. The central robust microcomputer will be located at Iowa State University to interface with transporters and buyers using modems and existing telephone lines. This system will process marketing information for ferrous metal, tires, batteries and waste oil.

5. Implementation of the network and information system for the Southeast region in Iowa, based in Fort Madison.

D. Operational Features

. Telephone line coupled system.

The proposed system will operate using existing telephone lines connected to a common data base management system.

. DECTALK or TOUCHTONE capability.

A DECTALK system can be used by buyers not possessing a computer terminal. This enables a touchtone telephone to be used. The caller (buyer or transporter) is answered with a synthesized voice to provide feedback when entering the system to check or verify input information on prices and quantities.

In order to prevent extreme or ridiculous numbers from being accepted as real data, verification will be required; automatic limits or bounds will also be placed on prices and quotes to prevent erroneous entries and to foil any subversive hackers.

As is done with stock and commodity trading, each entry will be made using a user code number. The time, buyer identification, quantity desired and offering price will be recorded. All information will be updated as rapidly as practical. Each entry will be made with a PIN (purchaser identification number) to insure that changes are made for the proper account.

. Use of WATS lines.

Incoming calls to the data base from within Iowa and from bordering states will be handled over WATS lines and 800 numbered lines.

E. Microcomputer System Information

A micro based system has the advantage of being much more portable than a mainframe. The database could be transferred to another machine with relative ease. If at a later date it was desired to move up to a mainframe, the conversion would not be difficult.

There are several programs that can perform the desired tasks of the database management system. Some of the factors that have to be considered are: the speed at which the program can retrieve information, the programming ability of the database language itself, and the ease to which it can be interfaced with outside programs. This final consideration is very important because the database will be required to interact over a telecommunication line with a remote operator, and this interaction will be controlled by an external program. Two database

programs that will be considered are dBASE IV and Oracle. Both databases have several useful features, and their costs are comparable.

An important piece of equipment that needs to be considered is one that will allow the remote users to communicate with the database with either a touchtone telephone, or microcomputer. In the case of a microcomputer, all that is required is a modem and a communication software package that will perform the desired operations. The touchtone communication is a more complicated operation. The equipment must be able to interpret touchtone signals as well as communicate verbally with the users. One such piece of equipment that will perform this operation is manufactured by Digital Equipment Corporation and called DECTALK DTC01. This device has the ability to interpret touchtone signals and convert them to recognizable signals for the microcomputer as well as having a built in speech synthesizer that will allow it to communicate with the users.

The equipment that is required on the remote end can be as simple as a touchtone telephone or as advanced as a terminal (microcomputer) with a modem connection and printer. The terminal and printer would have the advantage of being able to print all information at the remote site. This method might be preferred for communities that are actually retrieving information. Touchtone telephones would allow for relatively quick and easy updating of the database by the users of secondary material, as well as an inexpensive alternative for communities just getting started.

The rate of information transfer will be limited by the speed of the modem. The average time to display a screen of information to the user

using a 2400 baud modem will be in the range of 2 seconds. The best computer to be used is a Zenith 386 or equivalent machine. This was selected for its multi-tasking capability and expandability that will be utilized later in the project. The following is an estimate of the costs of the equipment mentioned above:

Zenith 386 with 2 megabyte of above board memory, 80 megabyte hard drive, monitor	$4400.00
Database communication software	300.00
DECTALK DTC01 (single line)	4200.00
or	or
DECTALK DTC01 (2 lines expandable to 8 lines)	9800.00
DECTALK line cards	3800.00/card
Communication software	120.00/site (3 sites)
2400 baud modems	200.00/site (3 sites)

F. Anticipated Results

1. An on-line computer based data management system for the selected recyclable materials. One of the most important results of this project will be a continually updated data bank of market information (buyer and seller sources, quantities desired or being marketed, ask and bid prices, etc.) for Iowa recyclers (regions, municipalities, companies) and secondary material buyers in Iowa and bordering states.

2. A regionally adjusted computer based data base and network for the selected recycled material availability, demand, shipping costs, and product quantity and container requirements.

3. A menu-driven based system requiring only updated prices and transportation costs to assist regional waste managers in comparing options or in selecting the most cost effective or least total cost alternatives for marketing and shipping the selected recyclable materials from a given region or municipality to selected buyer locations. This model will be regionally adjusted to reflect transportation costs from each region or municipality.

Proposed Work Plan and Timetable

Proposed starting date: January 1, 1990
Proposed completion date: December 31, 1990

Milestone	Activities Completed	Time Req'd(wks)	Prec. Milestone	Total Time Req'd(wks)
1.1	. Review objectives . Conduct survey of Iowa and surrounding states to determine demand for specified recycled materials	8	none	8
1.2	. Catalog information obtained in 1.1 into a disc file	3	1.1	11
1.3	. Conduct survey of rail, truck and barge companies to determine transportation costs from one or more selected regions to marketing points determined in 1.1	6	1.2	17
1.4	. Catalog information obtained in 1.3 into a disc file	2	1.3	19
1.5	. Development and refinement of data base from 1.2 and 1.4	2	1.4	21
1.7	. Installation including debugging of the test site at the City of Ames location.	8	1.5	29
1.8	. Initial testing of data network for the Ames region.	6	1.7	35
1.9	. Data collection, evaluation and reporting of results obtained in 1.8.	3	1.8	38
2.4	. Installation, demonstration and monitoring of use of data network and computer aided decision model in Fort Madison (Southeast) region.	3	1.9	41
2.5	. Evaluation and refinement of operational aspects of data network.	6	2.4	47

2.6	. Documentation of methodology and results for application to other states and regions.	6	1.9	44
2.7	. Summary of data from 2.4 and 2.5.	2	2.5	49
2.8	. Final report preparation.	3	2.6	52

Promotion of Network Approach to Sellers and Buyers

Sellers (recycling centers) are likely to approve wholeheartedly because of a need to reduce landfill mass. Buyers, on the other hand, will need to be convinced that networking is superior to unplanned purchases because of its market coverage and competitiveness. This can best be accomplished initially through direct contact with known buyers who favor such a system. Companies already contacted include Packaging Corporation of America in Tama (paper, cardboard) and Polymer Products of Iowa Falls (plastics). Individuals can be contacted by telephone or recycling center referral. Once an initial set of participants is using the network to buy materials, their endorsements can be used to persuade others to participate. Later, the proven economic effectiveness of a board of trade should enable the system to grow by popular demand as more buyers want to reap the benefits of sharing in it.

BUDGET
ENGINEERING RESEARCH INSTITUTE
Iowa State University

Proposed Period: 1/1/90-12/31/90

	Proposed (Grantor)	Proposed (ISU)
SALARIES AND WAGES		
SENIOR PERSONNEL:		
J. C. Even (2.0 summer mos.; 2.25 academic mos.)	$ 14,000	$ 15,750
S. K. Adams (2.0 summer mos.; 2.25 academic mos.)	11,265	12,675
OTHER PERSONNEL:		
Graduate Research Assistants (2)	27,000	
FRINGE BENEFITS		
23.8% of faculty salaries	6,010	6,770
$25/month for research assistants	600	0
EQUIPMENT		
Z-386 system	4,000	
Dectalk DTC01 System	13,600	
EXTERNAL MODEMS (3)	600	
COMPUTER SUPPLIES (modem, printer, monitor)	500	
MISCELLANEOUS MATERIALS AND SUPPLIES	4,000	
TRAVEL	5,000	
PUBLICATION COSTS	7,000	
TOTAL DIRECT COSTS	$ 93,575	$ 35,195
INDIRECT COSTS		
40% of mod. total direct costs		14,080
8% of mod. total direct costs--Iowa DNR	6,080	
32% remaining indirect--contributed by ISU		24,310
TOTAL DIRECT AND INDIRECT COSTS	$ 99,655	$ 49,275

Addendum A

Activities in Recently Completed Iowa Department of Natural Resources Project

It is important that the activities and accomplishments of the recent project be differentiated from those of the proposed project. It is also important to note that some of the activities originally proposed for the recent study were changed to reflect the economic preference for recycling over RDF production.

Activities for the recent (1988-1989) project included:

1. Conducting interviews and obtaining solid waste disposal data from the Iowa Department of Natural Resources (DNR).

2. Obtaining data from county engineers and city engineers (major cities) in Iowa.

3. Obtaining data from a stratified survey of manufacturing industries, service industries and institutions in Iowa.

4. Based on (2) and (3), cataloging refuse collection and disposal data for use in constructing demographic profiles and studying transportation logistics.

5. Mapping types and quantities of solid waste generated on a regional basis. Emphasis on RDF production and energy derivation has been replaced with emphasis on marketing secondary materials due to the present relatively low dollar value of fuels.

6. Compilation of transportation logistical data. Costs per ton, per semi-trailer load and per ton mile have been estimated through the collection of quotes from truck and rail companies.

7. Compilation and cataloging of economic data regarding market prices and transportation costs. Since the market horizon has been extended to include states bordering Iowa, this phase of the recent project will be extended in the proposed project.

8. Construction of a linear model showing total costs for collecting and recycling within each county or region. When the recent project was originally conceived, it was envisioned that each county or multi-county region would

operate as an economic unit with respect to RDF production and usage and material recycling. As discussed previously, it has been found that the marketing of secondary materials is economically preferable to RDF production. Also, markets for recycled materials are often not located within the same region and in many cases are in bordering states. Therefore, this step as originally planned is generally inappropriate to solving the problem unless local markets are available within a given region. It is, however, appropriate to the proposed project which considers marketing and transportation logistics on a broader scale.

9. Classification of counties and regions on the basis of solid waste management economic profiles. The concept of economic profile was related to the original objectives of RDF production and derivation of products from solid waste plant recovery systems. (See No. 8). As pointed out in activity 8, this is economically inferior to curbside source separation and marketing of individual materials in a purer form than that achievable using mechanical separation of mixed waste.

10. Investigation of the problem of recycling plastics and tires. A sizeable amount of literature of these topics (especially on the recycling of plastics) has been collected along with documented experience in other states. This has been summarized with advantages and disadvantages of known alternatives. The problem of determining and recommending specific solutions to the recycling of plastics and tires will be addressed more completely as part of the overall marketing profile for these products throughout Iowa and adjoining states in the proposed project.

In summary, the recent DNR funded study has been oriented around defining the nature and magnitude of the problem, identifying the direction and nature of practical alternatives and examining the overall economic feasibilities of these alternatives. The proposed project builds on this experience by developing a workable computer based data network among generators, transporters and users of secondary materials so that recycling can occur most economically.

Addendum B

Endorsements

The concept of this proposed work was discussed with Mr. Ron Mace at Fort Madison (by telephone) on December 5, 1988 and also with Mr. Dave Honkomp at Sheldon (by telephone) on December 30, 1988. Both individuals felt this communication network would benefit their recycling activities as long as the market information was correct and accurate.

Ms. Diane Foss with the Iowa Department of Economic Development was telephoned on January 5, 1989 regarding the computer based data bank they have developed on 6500 Iowa companies. She felt some of the information we will have in our system would be beneficial to their network. At present, however, their computer (IBM System 36) is too small for their own needs. Ms. Foss is positive about our proposed work.

Ms. Hay explained the contract for grant proposal.

Margaret Prahl commented that if the computer equipment purchased under this contract is to become the property of ISU it should be noted in the contract that it must be dedicated to this specific purpose.

Motion was made by Nancylee Siebenmann to approve, as presented, a contract with EPA for funding a computer network at ISU for marketing solid waste recyclable materials. Seconded by Clark Yeager. Motion carried unanimously.

IOWA'S SOLID WASTE STREAM: CHARACTERIZATION AND MANAGEMENT STRATEGIES REPORT

Teresa Hay, Division Administrator, Waste Management Authority Division, presented the following item.

Iowa Code section 455D.6 (i.e. section 6(5) of the Waste Volume Reduction and Recycling Act) requires the Director of the Department of Natural Resources to submit a report to the General Assembly on or before July 1, 1990 which characterizes Iowa's solid waste stream and contains a strategy for managing each major component of the waste stream. The strategy must assure that the waste stream's major components are managed according to the highest appropriate priority of the waste management hierarchy. The attached document is a draft of this mandated report. The completed report, along with an executive summary, will be distributed at the June Environmental Protection Commission meeting.

The report is divided into two parts. The first part briefly outlines Iowa's solid waste program, identifies methods for characterizing solid waste, and develops a solid waste characterization unique to Iowa.

The second part of the report identifies a strategy for managing the overall waste stream, strategies for managing the major components (paper, glass, plastics, metals, food and yard wastes) of the waste stream, and the framework for establishing a successful waste reduction and recycling program in Iowa.

Iowa's Waste Characterization

A waste characterization is a quantitative description of the various components that are discarded into the waste stream. A characterization of Iowa's solid waste stream was developed to identify the materials composing by weight a major proportion of the waste stream. Those materials which are identified as major components of Iowa's waste stream include paper, glass, metals,

plastics, yard waste, and food waste. Iowa's waste characterization depicts a waste stream that is similar to the national waste stream. The only significant difference arises in the metals and glass categories. Glass and metals seem to compose a smaller proportion of the waste stream in Iowa. This may be the result of Iowa's beverage container law which diverts large numbers of glass and aluminum containers from the waste stream.

Waste Management Strategies

Iowa's solid waste management hierarchy identifies volume reduction at the source and recycling and reuse as the preferred management methods, respectively. These methods are appropriate for managing each major component of Iowa's waste stream. This report recommends a three pronged strategy for managing Iowa's solid waste stream -- waste prevention, materials management, and market development of secondary materials.

Waste prevention refers not only to reductions in the amount of waste discarded into the waste stream, but also to reductions in the toxicity of the products entering the waste stream. It also refers to extending the life of individual products, thus preventing certain products or portions of products from entering the waste stream.

Waste prevention is not adequate by itself to significantly reduce the amount of waste ultimately being landfilled. Consequently, the recommended strategy includes promoting better materials management of individual products. Individual products should be better designed and manufactured so each can be easily recycled. In addition, discarded materials must be managed effectively so as to collect, process, and reuse the greatest amount of discards potentially possible.

The third part of the strategy requires market development for secondary materials. In other words, the markets for collected recyclables must be stimulated to result in a balance between the available supply of collected recyclables and the demand for these materials by end-users/manufacturers. This part of a waste management strategy is frequently overlooked.

Recommendations

The following policy framework as identified by the above management strategy must exist to preclude a waste management "crisis".

1) The comprehensive planning process should be used to promote and monitor the development of local waste reduction and recycling programs.

- solid waste comprehensive plans should be a vehicle for measureing the actual progress towards the waste reduction and recycling goals. If the goals are not met, the area not meeting the goals should be required to implement specific waste reduction and recycling programs and activities specified through the rulemaking process.

- the Landfill Alternative Grants Program administered by the Waste Management Authority Division should be broadened to include low-interest revolving loans to stimulate industry's use of secondary materials in their manufacturing processes.

2) A state-wide system should be established where solid waste disposal costs are based upon the amount of waste generated.

- each waste generator (i.e. household, business, industry, and institution) shall pay disposal fees based upon the volume of waste in which it generates. The present system does not result in the actual cost of disposal being paid by the generator. In many instances, the cost of disposal is spread to all taxpayers served by a specific landfill.

- all public and private landfills must be equipped with scales to measure the amount of waste which is being landfiller. At present, less than one third of all landfills in Iowa utilize scales. A weight-to volume conversion can be calculated using existing standards identified in the administrative code.

3) Every Iowa citizen should be provided the opportunity to recycle through municipal collection of recyclables or through a systematic drop-off process.

- curbside recycling programs should be required for metropolitan areas within the state. Iowans not living in these areas should be provided the opportunity to recycle through voluntary recycling programs or through drop-off boxes for recyclables located at all landfills and transfer stations.

4) The supply and demand for recyclables must be kept in relative balance for the statewide waste reduction and recycling goals to be met.

- manufacturers of certain products should be required to use a minimum percentage of secondary materials in their manufacturing processes.

- a market information network must be established to link collectors, processors and end-users of secondary materials to coordinate recycling efforts.

- state and local governments must establish procurement programs

where additional products manufactured from secondary materials are purchased to stimulate demand for recyclables.

5) Education of all Iowans concerning the need to reduce the quantity of waste generated through volume reduction at the source and recycling must be a high priority.

   - surveys should be conducted throughout the state to assess citizens' understanding of waste management issues. Educational programs should be tailored to the needs of individual audiences. Efforts must be made to stimulate participation, enhance collection efforts, and stimulate demand for products manufactured from recycled materials.

6) A Waste Reduction and Recycling Advisory Committee must be established to assess the various efforts and programs being utilized to meet the 25% and 50% reduction goals.

   - a non-partisan ad hoc committee composed of industry, state and local government, and several citizen representatives must be established to evaluate statewide progress towards achieving waste reduction goals. The Committee would be responsible for identifying barriers inhibiting progress and to develop potential solutions for overcoming these barriers.

(Report is shown on the following 6 pages)

Iowa's Solid Waste Stream: Characterization and Management Strategy

A Report to the General Assembly

Executive Summary

Iowa Department of Natural Resources
Larry J. Wilson, Director
July 1990

Iowa's Solid Waste Stream: Characterization and Management Strategy

Prepared by:

Robert W. Craggs
Monica M. Wnuk
Lisa J. Smith

Waste Management Authority Division
Coordination and Information Division

July 1990

Iowa Department of Natural Resources
Larry J. Wilson, Director

EXECUTIVE SUMMARY

INTRODUCTION

In 1989 Iowa established the goal of reducing solid waste disposal in landfills 25% by 1994 and 50% by the year 2000. These goals were established in response to rapidly shrinking landfill capacity, increasing public opposition to the disposal of solid waste in landfills, and continued increases in per capita waste generation.

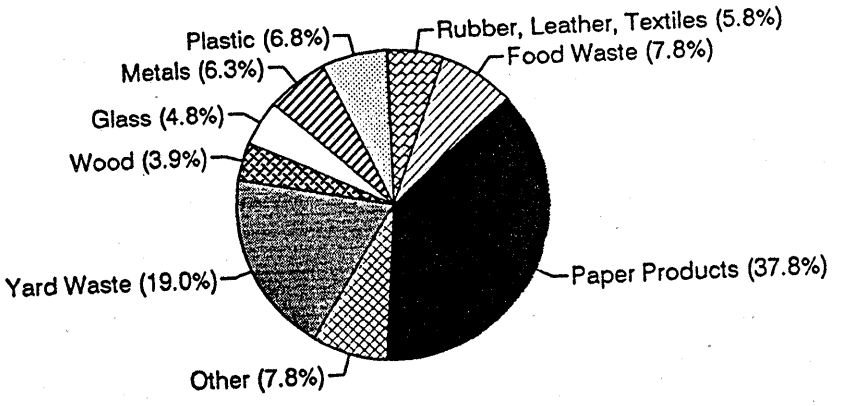
The Act also requires the Department of Natural Resources to submit a report to the General Assembly by July 1, 1990, which characterizes Iowa's solid waste and identifies waste management strategies for the major components of the waste stream. The findings of that report are highlighted in the following paragraphs.

DESCRIPTION OF IOWA'S SOLID WASTE STREAM

"Characterizing" solid waste is a term used to quantitatively describe the different components in a particular solid waste stream. By identifying the relative amounts and types of wastes generated, a planning area can tailor its solid waste management plans to its particular needs.

Iowa's waste stream is similar in composition to the national waste stream. Figure 1 illustrates Iowa's waste characterization.

Figure No. 1
Iowa Waste Characterization



(percent by weight discarded)

Paper and paperboard products, along with yard waste, are the largest components (by weight) of the waste stream and make up 50% to 60% of the waste stream. If the State's waste reduction and recycling goals are to be attained, at the very least, recycling and waste reduction programs for paper and paperboard and yard waste must be implemented.

SOLID WASTE MANAGEMENT STRATEGY

A three pronged strategy should be utilized to manage Iowa's solid waste stream:

- waste reduction
- management for recyclability
- market development for recycled materials.

Waste reduction contains three parts -- reduction of the quantity of waste, reduction of the toxicity of waste, and extending the useable life of products.

Management for recyclability involves two separate activities. First, products must be designed prior to manufacturing to enhance the products ability to be reclaimed. Second, each discarded material should be separated at the source to minimize contamination and enhance the value of each discard.

Market development for recycled materials is the key to the reuse of collected materials. Recycling involves not only collection and reprocessing, but also the reuse of materials. Adequate markets must exist whereby the demand by manufacturers/end users for recycled materials is balanced with the available supply of materials collected for recycling.

PROGRAM FRAMEWORK

In order to achieve the state's waste reduction and recycling goals, the following program framework must be established.

- The supply and demand for recycled materials must be kept in relative balance.

- Educational programs addressing the need to reduce the quantity of waste generated through waste reduction and to

recycle all the waste that remains must be established for all Iowans.

- Every citizen must be provided the opportunity to recycle through municipal collection of recycled materials or through a systematic drop-off process.

- Inequities in solid waste disposal costs between individual generators and different regions of Iowa must be eliminated.

- Comprehensive solid waste management plans, required for local governments, must be used as a means to direct and monitor progress towards statewide goals.

- State and local governmental solid waste programming efforts should be evaluated periodically.

KEY BARRIERS

Managing the waste stream involves understanding the unique problems associated with each component. Several barriers exist which must be overcome to develop effective statewide waste reduction and recycling programs.

- Lack of a convenient, accessible collection network with an effective transportation system for recyclable materials.

- Most consumer products are not labeled concerning their potential recyclability.

- Limited demand for recycled materials by end users/manufacturers.

- Technological and capacity limitations concerning the processing of materials into reusable recycled materials.

- Limited alternative uses for recycled materials.

- Material separation and contamination problems.

RECOMMENDATIONS

To establish the program framework described above and achieve the waste reduction and recycling goals of 25% by 1994 and 50% by the year 2000, the Department of Natural Resources makes the following recommendations.

THE STATEWIDE WASTE REDUCTION AND RECYCLING NETWORK ESTABLISHED BY SECTION 455D.5 OF THE IOWA CODE SHOULD BE ADEQUATELY FUNDED TO IMPLEMENT THE FOLLOWING PROGRAMS:

EDUCATION

Waste reduction and recycling information and education programs should be developed which target:

- children
- consumers
- household waste generators
- commercial waste generators
- landfill operators/managers
- environmental educators.

MARKET DEVELOPMENT

Financial assistance in the form of loans and loan guarantees should be targeted to create markets for recycled materials within Iowa.

PROCUREMENT

State procurement programs for the purchase of products manufactured with secondary materials should be expanded to local governments and to include additional products such as re-refined oil, cellulose insulation, and retreaded tires.

ALTERNATIVE USES

Subsidize research and demonstration projects that investigate alternative uses of secondary materials.

ENFORCEMENT

If the 25% statewide waste reduction goal is not attained by 1994, those solid waste disposal facilities within planning areas failing to achieve the reduction goal should be subject to an increased tonnage fee.

Ms. Hay gave a detailed explanation of the report and distributed an Executive Summary of same. She stated that recommendations are different in the Executive Summary than what is shown in the technical report. The technical report will be updated to correlate with the Executive Summary.

Discussion followed regarding various items in the report.

Chairperson Mohr remarked that Hammer Plastics Recycling in Iowa Falls, and Iowa Plastics in Sioux Center, should be commended for using recycled plastics in their manufacuring process.

This was an informational item; no action was required.

FISCAL YEAR 1991 OPERATIONS BUDGET

Stan Kuhn, Division Administrator, Administrative Services Division, presented the following item.

Attached is budget history for fy 88 and fy89, fy 90 actual through April 30, fy90 budget, and fy91 based on DOM's interpretation of recent legislative appropriation actions. This information is provided for DNR operations at the agency, division and bureau levels. Currently, the staff is revising the fy 91 budget estimates within the limits of appropriation actions and available Federal and State earmarked receipts. In future months, the revised fy 91 budget as well as the fy92 and fy93 requests will be presented to both commissions for review and approval. This item presents the major changes in DNR operations anticipated by staff in the following fiscal periods.

Staff will attempt to respond to questions regarding this budget information. If major changes in direction are desired by either commission, those issues should be made know so they can be factored into the budgeting process.

Attached you will find budget information listed by Division & Bureau. The columns listed are fy 88 actual, fy 89 actual, fy 90 actual through April, fy 90 budget, & fy 91 legislative action. You will note that revenue information for fy 90 actual through April as well as Bureau level information has been crossed out. Because of the limitations of the state's accounting system, current year revenues must be tracked through a separate internal DNR system. The results are entered at year end at the Division level only. As a result current year to date revenue information at the Division level as well as all Bureau level revenue information is not accurately depicted on the attached sheets and has been crossed out. The following is a comparison by Division of the fy 90 budget as it relates to fy 91 legislative action (last 2 columns of information) as well as a brief discription of significant program shifts anticipated for fy 92 & fy 93

Directors Office-Fy 91 legislative action reflects the maintenance of operations at the same level as fy 90. This level should continue through fy 92 & fy 93.

Coordination & Information Division-Fy 91 legislative action reflects the additional effort necessary to conduct Resource Enhancement & Protection (REAP) Congress activities required by REAP legislation. The additional 1.63 Full Time Equivalents (fte) listed represent per diem for REAP Congress participants. The Division expects to request additional resources in fy 92 & fy 93 to address groundwater education issues, River Basin Association membership, & continue REAP Congress activities.

Administrative Services Division-Fy 91 legislative action reflects the maintenance of operations at fy 90 levels. An increase to clerical staff support will be sought in fy 92 & fy 93 to address the additional work loads brought about by program expansions which have occurred primarily in environmental program areas.

Parks Preserves & Recreation Division-Fy 91 legislative action reflects a decrease in operational facility maintenance funding by $54,706. The reduction is due to the nonrenewal of an appropriation of funds for the purchase of such things as fire rings, grilles, picnic tables etc requested in fy 90. Also reflected in the in the legislative action column is a 1 fte increase for the Preserves Bureau for staffing to complete Preserves Area Mgt Plans. This additional fte was vetoed by the Governor prior to signing the appropriation bill. The Division expects to request additional resources in fy 92 & fy 93 for park program promotion activities as well as funding for annual routine replacement of of such items as fire rings, grilles, etc.

Forests & Forestry Division-While legislative action shows a 2.11 fte increase in Division staffing over fy 90 this increase simply reflects the elimination of a separate Loess Hill Pioneer State Forest appropriation. The funds which were appropriated separately were merged with Foresty's operational appropriation. Taking this into consideration there is no net change between fy 90 & fy 91 in Loess Hills operations. Legislative action also reflects a $70,000 reduction in one time equipment purchases completed in fy 90 for the Farm Forestry Bureau ($40,000) & Bureau Mgt ($30,000). These one time purchases included personal computers for forestry field locations, 2 new vehicles, & other miscellaneous equipment related to state forest maintenance activities. The Division expects to request additional resources in fy 92 & fy 93 to increase service to landowners in the areas of forest resource mgt. & tree planting, & to increase the level of forest mgt. on state forests, parks & wildlife areas.

Energy & Geological Survey Division- Legislative action increased the fte ceiling for the Geological Survey Bureau by .5 fte. Additional funds were not appropriated to cover the increase nor

did the legislature indicate a use for the additional staffing. Potentially the .5 fte could be used to to respond to increases in the availability of federal or other earmarked funding sources. In addition to the fte increase, professional & scientific services show a decrease between fy 90 & fy 91 of about $550,000. This decrease in the local gov't energy mgt program will not occur. Oil overcharge & Utility Refund dollars will continue to be used to provide technical analysis of energy conservation measures proposed by local government. No significant program increases are expected for fy 92 & fy 93.

Environmental Protection Division-Fy 91 legislative action eliminated the additional Flood Plain position authorized in fy 90. The new position has not been filled due to difficulties encountered finding acceptable engineering candidates willing to accept the position at the salary level offered. The Division expects to continue seeking additional resources in fy 92 & fy 93 to expand efforts relating to air quality toxics, groundwater monitoring & surface water protection.

Fish & Wildlife Division-Legislative action increases over fy 90 included 5 fte ($116,453) to accomplish the federally funded Mississippi Monitoring Project. An increase of 3 fte & support totaling $188,223 was authorized for additional Law Enforcement Officers. The additional staffing is to be paid for from additional receipts generated from the sale of non resident Deer & Turkey hunting licenses. The Division will be requesting increases in fy 92 & fy 93 to reflect the availability of additional federal funding for such activities as Mississippi Monitoring.

Waste Mgt Authority Division-Fy 91 legislative action reflected the maintenance of operations at fy 90 levels. The 4 fte increase shown on the financial detail is an error which will be corrected. Additional initiatives in the area of promotion & education concerning solid & hazardous waste reduction efforts is expected in fy 92 & fy 93.

Mr. Kuhn explained that in response to a Commissioners question last month on a figure in the Groundwater Fund relating to the Health Department, the General Assembly had some thought that the increased groundwater monitoring activity would generate a greater demand on the Health Department for statistics. It has not been determined if the Health Department has had any increase in the workload. He explained the budget in detail and asked that the Commission let him know of any policy issues or major shift in program direction they desire.

Margaret Prahl indicated that she would like to see a simple pie chart type of document to show comparisons to last year's budget.

Mike Earley suggested that staff develop a budget document similar to the appropriations request submitted to the Governor

in November, 1989. He added that it is only 22 pages and it contains all the information that is needed.

Mr. Kuhn stated that he has to provide adequate information to both Commissions and at the same time try to satisfy the Department of Management in the alloted time frame, but he will work in that direction.

William Ehm stated that, although not a major shift in philosophy, he continues to be concerned about surface and groundwater contaminations and the accusations that are being made about those types of contamination. He related that there is a need to continue to stress monitoring and possibly expand groundwater monitoring systems to determine if the situation is actually getting worse.

A copy of the proposed budget is on file in the Records Center of the department.

This was an informational item; no action was required.

FINANCIAL STATUS REPORT

Stan Kuhn, Division Administrator, Administrative Services Division, presented the following item.

Attached is the Monthly Financial Status Report as of May 31, 1990 by DNR division for operations. This has not been analyzed in detail as of the date of this agenda brief. However, no major issues, other than those discussed at previous meetings are anticipated.

(Report is shown on the following 3 pages)

J080C103

IOWA DEPARTMENT OF NATURAL RESOURCES
SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 05/31/90

	TOTAL EXPENDITURES 05/01/90 - 05/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
1000 DIRECTOR'S OFFICE	25,306.49	198,046.58	205,241.00	7,194.42-	223,101.00
101 PERSONAL SERVICES	3,324.12	34,299.91	33,600.00	699.91	40,000.00
202 PERSONAL TRAVEL	0.00	1,576.16	1,000.00	576.16	1,200.00
301 OFFICE SUPPLIES	43.75	665.50	1,000.00	334.50-	1,200.00
303 EQUIPMENT MAINTENANCE SUP	0.00	1,003.26	110.00	893.26	120.00
308 OTHER SUPPLIES	1,902.85	11,889.20	10,100.00	1,789.20	14,120.00
309 PRINTING & BINDING	0.00	29.58	4,500.00	4,470.42-	6,000.00
405 PROF & SCIENTIFIC SERVICE	0.00	597.85	2,500.00	1,902.15-	3,200.00
406 OUTSIDE SERVICES	0.00	1,910.25	3,600.00	1,689.75-	4,800.00
410 DATA PROCESSING	84.31	673.01	0.00	673.01	0.00
414 REIMBURSEMENTS TO OTHER A	0.00	2,274.75	4,800.00	2,525.25-	4,800.00
501 EQUIPMENT					
ORGANIZATION TOTAL	30,661.52	252,966.05	266,451.00	13,484.95-	298,541.00

J080C103

IOWA DEPARTMENT OF NATURAL RESOURCES
SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 05/31/90

	TOTAL EXPENDITURES 05/01/90 - 05/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
2000 COORDINATION AND INFORMATION	171,696.35	1,357,842.38	1,361,718.00	3,875.62-	1,481,952.00
101 PERSONAL SERVICES	5,371.95	42,236.10	39,050.00	3,186.10	45,800.00
202 PERSONAL TRAVEL	616.78	8,303.22	9,109.00	805.78-	10,931.00
203 STATE VEHICLE OPERATION	1,260.00	13,215.00	14,750.00	1,535.00-	17,700.00
204 STATE VEHICLE DEPRECIATIO	20,899.05	84,659.22	58,750.00	25,909.22	70,500.00
301 OFFICE SUPPLIES	1,542.73	15,663.78	20,166.00	4,502.22-	24,000.00
302 FACILITY MAINTENANCE SUPP	943.07	10,427.02	10,000.00	427.02	12,000.00
303 EQUIPMENT MAINTENANCE SUP	0.00	220.00	500.00	280.00-	500.00
307 AG.,CONSERVATION & HORT S	9,438.96	66,259.28	23,950.00	42,309.28	28,700.00
308 OTHER SUPPLIES	11,697.76	296,404.22	314,388.00	17,983.78-	373,950.00
309 PRINTING & BINDING	20.62	2,393.16	2,708.00	314.84-	2,850.00
312 UNIFORMS & RELATED ITEMS	1,539.39	11,784.56	7,666.00	4,118.56	9,200.00
401 COMMUNICATIONS					

J080C103

IOWA DEPARTMENT OF NATURAL RESOURCES
SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 05/31/90

	TOTAL EXPENDITURES 05/01/90 - 05/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
3000 ADMINISTRATIVE SERVICES DIV.	454,035.19	3,417,817.36	3,530,172.00	112,354.64-	3,870,134.00
101 PERSONAL SERVICES	5,033.63	40,282.40	50,766.00	10,483.60-	61,400.00
202 PERSONAL TRAVEL	6,189.91	45,305.86	50,995.00	5,689.14-	58,500.00
203 STATE VEHICLE OPERATION	5,355.00	59,080.00	60,325.00	1,245.00-	68,500.00
204 STATE VEHICLE DEPRECIATIO	35,960.12	413,316.17	309,100.00	104,216.17	340,050.00
301 OFFICE SUPPLIES	115.98	434.83	1,600.00	1,165.17-	1,700.00
302 FACILITY MAINTENANCE SUPP	10,265.57	64,293.64	56,695.00	7,598.64	63,390.00
303 EQUIPMENT MAINTENANCE SUP	2,405.17	13,236.24	11,383.00	1,853.24	12,900.00
308 OTHER SUPPLIES	8,279.00	27,404.60	22,849.00	4,555.60	27,075.00
309 PRINTING & BINDING	1,720.27	3,028.73	4,200.00	1,171.27-	4,200.00
312 UNIFORMS & RELATED ITEMS	42,740.77	187,401.70	185,026.00	2,375.70	221,900.00
401 COMMUNICATIONS	0.00	328.50	375.00	46.50-	500.00
402 RENTALS	1,801.01	21,798.97	32,456.00	10,657.03-	35,950.00
406 OUTSIDE SERVICES	23,217.95	86,047.91	100,966.00	14,918.09-	119,500.00
410 DATA PROCESSING	15,337.00	90,832.00	100,000.00	9,168.00-	112,000.00
412 AUDITOR OF STATE REIMBURS	2,512.93	12,884.33	9,250.00	3,634.33	11,650.00
414 REIMBURSEMENTS TO OTHER A	28,006.09	118,040.07	130,858.00	12,817.93-	142,350.00
501 EQUIPMENT					

J080C103

IOWA DEPARTMENT OF NATURAL RESOURCES
SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 05/31/90

	TOTAL EXPENDITURES 05/01/90 - 05/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
4000 PARKS, PRES. & RECREATION DIV.					
101 PERSONAL SERVICES	634,143.22	4,495,610.65	4,511,170.00	15,559.35-	5,073,170.00
202 PERSONAL TRAVEL	5,246.22	49,914.90	89,231.00	39,316.10-	103,709.00
203 STATE VEHICLE OPERATION	13,832.15	163,471.72	162,713.00	758.72	179,776.00
204 STATE VEHICLE DEPRECIATIO	16,985.00	188,680.00	257,617.00	68,937.00-	287,369.00
301 OFFICE SUPPLIES	3,298.61	30,643.67	42,185.00	11,541.33-	45,575.00
302 FACILITY MAINTENANCE SUPP	75,460.46	565,170.64	576,914.00	11,743.36-	692,568.00
303 EQUIPMENT MAINTENANCE SUP	23,393.67	235,951.89	233,137.00	2,814.89	294,000.00
307 AG.,CONSERVATION & HORT S	1,076.78	9,277.83	11,580.00	2,302.17-	19,500.00
308 OTHER SUPPLIES	6,409.76	50,716.34	21,922.00	28,794.34	26,944.00
309 PRINTING & BINDING	5,001.95	31,727.50	74,239.00	42,511.50-	102,339.00
312 UNIFORMS & RELATED ITEMS	13,929.23	37,625.79	42,366.00	4,740.21-	49,433.00
401 COMMUNICATIONS	9,757.65	70,639.99	59,752.00	10,887.99	72,182.00
402 RENTALS	754.57	21,220.83	14,682.00	6,538.83	20,540.00
403 UTILITIES	22,868.46	287,482.28	228,828.00	58,654.28	293,276.00
405 PROF & SCIENTIFIC SERVICE	3,200.00	24,530.75	44,445.00	19,914.25-	60,045.00
406 OUTSIDE SERVICES	11,792.32	131,880.24	116,877.00	15,003.24	165,332.00
408 ADVERTISING & PUBLICITY	544.08	4,482.81	4,030.00	452.81	4,030.00
410 DATA PROCESSING	0.00	2,523.36	5,885.00	3,361.64-	8,000.00
414 REIMBURSEMENTS TO OTHER A	4,214.22	10,198.65	733.00	9,465.65	1,675.00
501 EQUIPMENT	16,887.56	197,022.10	182,075.00	14,947.10	197,730.00
701 LICENSES	262.77	432.77	2,464.00	2,031.23-	2,498.00
DIVISION TOTAL	869,058.68	6,609,204.71	6,682,845.00	73,640.29-	7,699,691.00

J080C103

IOWA DEPARTMENT OF NATURAL RESOURCES
SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 05/31/90

	TOTAL EXPENDITURES 05/01/90 - 05/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
5000 FORESTRY DIVISION					
101 PERSONAL SERVICES	218,528.59	1,551,303.10	1,590,217.00	38,913.90-	1,715,917.00
202 PERSONAL TRAVEL	6,186.44	37,570.71	33,766.00	3,804.71	40,235.00
203 STATE VEHICLE OPERATION	6,124.51	61,746.34	68,515.00	6,768.66-	75,000.00
204 STATE VEHICLE DEPRECIATIO	9,065.00	98,710.00	109,085.00	10,375.00-	118,900.00
301 OFFICE SUPPLIES	6,368.44	49,365.43	15,500.00	33,865.43	16,920.00
302 FACILITY MAINTENANCE SUPP	2,442.69	16,914.49	28,316.00	11,401.51-	31,000.00
303 EQUIPMENT MAINTENANCE SUP	7,725.87	50,814.05	49,966.00	848.05	58,700.00
307 AG.,CONSERVATION & HORT S	9,861.54	77,114.72	108,178.00	31,063.28-	108,378.00
308 OTHER SUPPLIES	500.95	13,144.00	15,750.00	2,606.00-	15,900.00
309 PRINTING & BINDING	4,122.30	11,977.50	18,320.00	6,342.50-	18,720.00
312 UNIFORMS & RELATED ITEMS	793.68	13,148.45	14,158.00	1,009.55-	14,225.00
401 COMMUNICATIONS	3,649.93	23,992.51	19,180.00	4,812.51	23,230.00
402 RENTALS	2,707.91	18,599.16	14,200.00	4,399.16	17,200.00
403 UTILITIES	2,769.82	24,783.13	24,450.00	333.13	26,084.00
406 OUTSIDE SERVICES	23,369.90	39,277.25	40,400.00	1,122.75-	42,800.00
408 ADVERTISING & PUBLICITY	19.20	463.61	900.00	436.39-	900.00
410 DATA PROCESSING	0.00	1,567.04	700.00	867.04	700.00
414 REIMBURSEMENTS TO OTHER A	135.26	974.61	1,050.00	75.39-	1,100.00
501 EQUIPMENT	4,570.08	60,564.61	97,787.00	37,222.39-	100,304.00
701 LICENSES	0.00	305.00	91.00	214.00	100.00
DIVISION TOTAL	308,942.11	2,152,335.71	2,250,529.00	98,193.29-	2,426,313.00

J080C103

IOWA DEPARTMENT OF NATURAL RESOURCES
SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 05/31/90

	TOTAL EXPENDITURES 05/01/90 - 05/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
6000 ENERGY & GEOLOGICAL RESOURCES					
101 PERSONAL SERVICES	257,855.90	1,920,354.95	1,994,392.00	74,037.05-	2,161,890.00
202 PERSONAL TRAVEL	4,828.39	57,961.08	67,916.00	9,954.92-	77,592.00
203 STATE VEHICLE OPERATION	2,283.07	18,434.59	24,012.00	5,577.41-	26,540.00
204 STATE VEHICLE DEPRECIATIO	2,220.00	23,135.00	21,488.00	1,647.00	23,442.00
301 OFFICE SUPPLIES	785.25	15,920.18	11,876.00	4,044.18	13,296.00
302 FACILITY MAINTENANCE SUPP	162.09	2,699.07	3,300.00	600.93-	3,800.00
303 EQUIPMENT MAINTENANCE SUP	393.29	3,323.97	3,400.00	76.03-	3,600.00
304 PROF. & SCIENTIFIC SUPPL	0.00	6,246.69	13,351.00	7,104.31-	13,546.00
308 OTHER SUPPLIES	3,394.16	38,398.18	26,233.00	12,165.18	28,200.00
309 PRINTING & BINDING	27,337.60	43,338.87	43,153.00	185.87	46,600.00
401 COMMUNICATIONS	1,298.75	13,624.46	16,966.00	3,341.54-	18,512.00
402 RENTALS	175.00	2,003.60	1,925.00	78.60	2,100.00
403 UTILITIES	1,406.47	10,362.75	18,403.00	8,040.25-	19,750.00
405 PROF & SCIENTIFIC SERVICE	275,655.73	913,393.74	1,904,342.00	990,948.26-	2,176,361.00
406 OUTSIDE SERVICES	929.01	16,718.24	9,568.00	7,150.24	10,763.00
410 DATA PROCESSING	0.00	8,602.63	12,363.00	3,760.37-	14,168.00
414 REIMBURSEMENTS TO OTHER A	1,317.24	8,302.44	5,250.00	3,052.44	6,162.00
501 EQUIPMENT	20,334.55	84,479.48	58,688.00	25,791.48	63,001.00
DIVISION TOTAL	600,376.50	3,187,299.92	4,236,626.00	1,049,326.08-	4,709,323.00

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SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 05/31/90

	TOTAL EXPENDITURES 05/01/90 - 05/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
7000 ENVIRONMENTAL PROTECTION DIV:					
101 PERSONAL SERVICES	674,821.63	4,985,020.25	5,066,440.00	81,419.75-	5,500,002.00
202 PERSONAL TRAVEL	9,142.82	77,369.97	144,654.00	67,284.03-	158,000.00
203 STATE VEHICLE OPERATION	3,819.67	32,161.26	37,420.00	5,258.74-	43,000.00
204 STATE VEHICLE DEPRECIATIO	4,670.00	51,700.00	58,083.00	6,383.00-	63,000.00
301 OFFICE SUPPLIES	1,624.71	26,040.76	38,425.00	12,384.24-	39,950.00
302 FACILITY MAINTENANCE SUPP	52.22	1,452.91	2,500.00	1,047.09-	2,500.00
303 EQUIPMENT MAINTENANCE SUP	944.26	6,785.74	8,300.00	1,514.26-	9,800.00
304 PROF. & SCIENTIFIC SUPPL	0.00	426.80	4,500.00	4,073.20-	5,000.00
308 OTHER SUPPLIES	3,806.12	16,480.09	21,478.00	4,997.91-	24,320.00
309 PRINTING & BINDING	4,645.25	15,731.60	37,133.00	21,401.40-	38,650.00
312 UNIFORMS & RELATED ITEMS	13.51	6,038.68	3,200.00	2,838.68	3,200.00
401 COMMUNICATIONS	5,400.07	32,264.46	30,050.00	2,214.46	35,650.00
402 RENTALS	2,816.34	40,346.70	37,565.00	2,781.70	45,065.00
403 UTILITIES	781.34	7,962.92	11,615.00	3,652.08-	14,145.00
405 PROF & SCIENTIFIC SERVICE	16,440.00	418,547.66	1,139,304.00	720,756.34-	1,359,700.00
406 OUTSIDE SERVICES	3,566.76	26,907.34	33,537.00	6,629.66-	37,170.00
408 ADVERTISING & PUBLICITY	370.16	4,216.96	3,100.00	1,116.96	3,200.00
410 DATA PROCESSING	0.00	98,254.21	111,825.00	13,570.79-	137,500.00
414 REIMBURSEMENTS TO OTHER A	3,277.81	10,707.23	12,355.00	1,647.77-	13,950.00
501 EQUIPMENT	7,777.48	231,949.95	435,359.00	203,409.05-	474,950.00
701 LICENSES	30.00	80.00	285.00	205.00-	285.00
DIVISION TOTAL	744,000.15	6,090,445.49	7,237,128.00	1,146,682.51-	8,009,037.00

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SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 05/31/90

	TOTAL EXPENDITURES 05/01/90 - 05/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
8000 FISH AND WILDLIFE DIVISION					
101 PERSONAL SERVICES	1,210,869.84	9,307,528.90	9,118,678.00	188,850.90	9,981,126.00
202 PERSONAL TRAVEL	28,744.62	316,217.72	319,007.00	2,789.28-	354,865.00
203 STATE VEHICLE OPERATION	40,058.70	402,101.08	444,697.00	42,595.92-	502,455.00
204 STATE VEHICLE DEPRECIATIO	51,895.00	556,005.00	531,656.00	24,349.00	587,706.00
301 OFFICE SUPPLIES	6,790.93	176,289.62	152,605.00	23,684.62	176,090.00
302 FACILITY MAINTENANCE SUPP	32,334.76	351,613.90	420,600.00	68,986.10-	515,191.00
303 EQUIPMENT MAINTENANCE SUP	38,575.67	321,400.68	336,646.00	15,245.32-	390,099.00
307 AG.,CONSERVATION & HORT S	48,744.03	277,657.62	314,292.00	36,634.38-	364,062.00
308 OTHER SUPPLIES	10,456.09	101,586.14	96,701.00	4,885.14	107,638.00
309 PRINTING & BINDING	14,560.95	112,648.56	122,132.00	9,483.44-	128,226.00
312 UNIFORMS & RELATED ITEMS	12,776.45	109,213.86	121,302.00	12,088.14-	125,200.00
401 COMMUNICATIONS	19,871.90	149,815.09	138,791.00	11,024.09	161,317.00
402 RENTALS	1,671.00	35,472.09	47,118.00	11,645.91-	51,035.00
403 UTILITIES	19,530.25	172,834.27	191,023.00	18,188.73-	220,306.00
405 PROF & SCIENTIFIC SERVICE	24,743.32	120,843.55	168,387.00	47,543.45-	173,968.00
406 OUTSIDE SERVICES	6,839.19	147,033.66	123,063.00	23,970.66	140,616.00
408 ADVERTISING & PUBLICITY	163.69	14,683.92	26,870.00	12,186.08-	26,870.00
410 DATA PROCESSING	0.00	40,726.80	37,707.00	3,019.80	38,000.00
414 REIMBURSEMENTS TO OTHER A	17,888.22	89,733.88	91,100.00	1,366.12-	100,250.00
501 EQUIPMENT	26,960.69	264,460.26	379,670.00	115,209.74-	392,861.00
602 OTHER EXPENSES & OBLIGATI	0.00	1,450.00	550.00	900.00	600.00
701 LICENSES	0.00	135.00	155.00	20.00-	170.00
DIVISION TOTAL	1,613,475.30	13,069,451.60	13,182,750.00	113,298.40-	14,538,651.00

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SUMMARY OF EXPENDITURES VS. YEAR-TO-DATE PLAN
AS OF 05/31/90

	TOTAL EXPENDITURES 05/01/90 - 05/31/90	TOTAL EXPENDITURES FY-TO-DATE	YEAR-TO-DATE PLAN	OVER/UNDER YEAR-TO-DATE PLAN	CURRENT ANNUAL BUDGET
9000 WASTE MANAGEMENT AUTHORITY					
101 PERSONAL SERVICES	47,551.58	344,637.04	345,247.00	609.96-	374,082.00
202 PERSONAL TRAVEL	13,040.12	32,951.36	20,088.00	12,863.36	22,000.00
301 OFFICE SUPPLIES	109.40	5,161.27	6,627.00	1,465.73-	7,325.00
308 OTHER SUPPLIES	6,111.50	7,223.31	6,330.00	893.31	7,000.00
309 PRINTING & BINDING	5,641.75	15,766.91	50,187.00	34,420.09-	55,188.00
406 OUTSIDE SERVICES	7,208.33	17,684.34	5,499.00	12,185.34	6,000.00
408 ADVERTISING & PUBLICITY	0.00	610.00	0.00	610.00	0.00
410 DATA PROCESSING	0.00	2,279.83	5,499.00	3,219.17-	6,000.00
414 REIMBURSEMENTS TO OTHER A	60.00	7,383.34	11,191.00	3,807.66-	12,200.00
501 EQUIPMENT	916.47	12,240.99	16,497.00	4,256.01-	17,270.00
DIVISION TOTAL	80,639.15	445,938.39	467,165.00	21,226.61-	507,065.00

Mr. Kuhn explained details of the report and noted that postage costs expanded by 25% for the last two years. In the future, mailing costs for programs with re-occurring mailings will be shown in the individual division budgets rather than in the administrative division budget.

This was an informational item; no action was required.

MONTHLY REPORTS

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

The following monthly reports are enclosed with the agenda for the Commission's information.

1. Rulemaking Status Report
2. Variance Report
3. Hazardous Substance/Emergency Response Report
4. Enforcement Status Report
5. Contested Case Status Report

Members of the department will be present to expand upon these reports and answer questions.

(Reports shown on the following 10 pages)

IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION COMMISSION
RULEMAKING STATUS REPORT
June 1, 1990

PROPOSAL	NOTICE TO COMMISSION	NOTICE PUBLISHED	RULES REVIEW COMMITTEE	HEARING	SUMMARY OF COMMENTS & RECOMMENDATIONS TO COMMISSION	RULES ADOPTED	RULES PUBLISHED	RULE EFFECTIVE
1. Ch. 22 - Controlling Air Pollution	5/21/90	6/13/90	*7/ /90	*7/11/90 *7/12/90	*8/20/90	*8/20/90	*9/19/90	*10/24/90
2. Ch. 23 - Asbestos Demolition and Renovation	2/19/90	3/21/90	4/12/90	4/12/90	5/21/90	5/21/90	6/13/90	*7/18/90
3. Ch. 23 - Open Burning/Trees and Tree Trimmings	3/19/90	4/18/90	5/09/90	5/22/90 5/23/90 5/24/90	*7/16/90	*7/16/90	*8/08/90	*9/12/90
4. Ch. 39 - Requirements for Properly Plugging Abandoned Wells	6/18/90	*7/11/90	*8/ /90	*8/ /90	*9/17/90	*9/17/90	*10/17/90	*11/21/90
5. Ch. 40, 41 & 43 - Water Supply Surface Water Filtration	5/21/90	6/13/90	*7/ /90	*7/09/90 *7/10/90 *7/11/90 *7/12/90	*8/20/90	*8/20/90	*9/19/90	*10/24/90
6. Ch. 61 - Water Quality Standards - Human Health Criteria	6/18/90	*7/11/90	*8/ /90	*8/ /90	*9/17/90	*9/17/90	*10/17/90	*11/21/90
7. Ch. 61 - Water Body Classifications	5/21/90	6/13/90	*7/ /90	*7/09/90 *7/10/90	*8/20/90	*8/20/90	*9/19/90	*10/21/90
8. Ch. 63 - CBOD Limits for Industry	*7/16/90	*8/08/90	*9/ /90	*9/ /90	*10/15/90	*10/15/90	*11/14/90	*12/19/90
9. Ch. 69 & 121 - Land Application of Municipal Sludge and Other Wastes	5/21/90	6/13/90	*7/ /90	*7/09/90 *7/10/90 *7/11/90	*8/20/90	*8/20/90	*9/19/20	*10/24/90
10. Ch. 100, 101 - General Requirements Relating to Solid Waste Disposal	3/19/90	4/18/90	5/09/90	5/08/90	6/18/90	6/18/90	*7/11/90	*8/15/90

MONTHLY VARIANCE REPORT

Month: May, 1990

No.	Facility	Program	Engineer	Subject	Decision	Date
1.	Kermit Strickler Appanoose County	Air Quality		Structures	Approved	05/10/90
2.	Latimer, City of	Air Quality		Landscape Waste	Denied	05/10/90
3.	Des Moines, City of	Wastewater Construction	Brice,Petrides-Donohue	Sewer Stream Crossing	Approved	05/04/90
4.	Chillicothe, City of	Wastewater Construction	IIW Engineering	Check Valve Location	Denied	05/10/90
5.	Tama Meat Packing Co. (A)	Wastewater Operation		Monitoring Frequency (Dissolved Oxygen)	Denied	05/01/90
6.	Tama Meat Packing Co. (B)	Wastewater Operation		Monitoring Frequency (Settleable Solids)	Approved	05/01/90
7.	Tama Meat Packing Co. (C)	Wastewater Operation		Monitoring Frequency (Cell Depth Measurement)	Approved	05/01/90
8.	John Deere Dubuque Works	Wastewater Operation	David Fausch	Monitoring Frequency	Denied	05/14/90
9.	St. Charles, City of	Watersupply Construction	Veenstra & Kimm, Inc.	Construction Materials	Approved	05/11/90
10.	Maple River West Side	Watersupply Construction	Kuehl & Payer	Siting Criteria	Denied	05/24/90
11.	Oakland, City of	Watersupply Construction	Kuehl & Payer	Siting Criteria	Denied	05/29/90

NUMBERS IN PARENTHESES REPRESENT REPORTS FOR THE SAME PERIOD IN FISCAL YEAR 1989

		Substance Type				Mode				
Month	Total # of Incidents	Petroleum Product	Agri. Chemical	Other Chemicals and Substances	Handling and Storage	Pipeline	Highway Incident	RR Incident	Fire	Other
May	150 (124)	69 (33)	60 (57)	21 (34)	113 (56)	1 (2)	17 (52)	2 (2)	5 (1)	12(11)

Total # of Incidents Per Field Office This Period

01	02	03	04	05	06
28	24	16	20	36	26

REPORTS OF RELEASES FROM UNDERGROUND STORAGE TANKS

During the period of May 1, 1990 through May 31, 1990, the following number of releases from underground storage tanks were identified.

146 (38)

The number in parentheses represents the number of releases during the same period in Fiscal Year 1989.

Enforcement Report Update

The following new enforcement actions were taken last month:

Name, Location and Field Office Number	Program	Alleged Violation	Action	Date
Farmegg Products, Humboldt (2)	Drinking Water	Monitoring/Reporting-Bacteria	Order/Penalty	5/02/90
Park Village Apartments, Waverly (1)	Drinking Water	Monitoring/Reporting-Other	Order/Penalty	5/02/90
Carroll Country Club, Carroll (4)	Drinking Water	Monitoring/Reporting-Bacteria	Order/Penalty	5/02/90
Meadow Lane Mobile Home Park, Denver (1)	Drinking Water	Public Notification	Order/Penalty	5/02/90
Irvin Lange, Alden (2)	Air Quality	Open Burning	Order/Penalty	5/02/90
Mason City Water Supply (2)	Drinking Water	Monitoring/Reporting-Other	Order/Penalty	5/04/90
Spring Grove Mobile Home Park, Burlington (6)	Drinking Water	Monitoring/Reporting-Inorganics	Amended Order	5/09/90
Wyman L. Bush, Winterset (5)	Wastewater	Operational Violations	Order	5/09/90
Gary Fairbanks, Dean Plaage, Donald Ott and Robert A. Pals, Franklin County (2)	Wastewater Solid Waste	Prohibited Discharge Illegal Disposal	Order/Penalty	5/09/90
Corwith Water Supply (2)	Drinking Water	Monitoring Reporting-Radioactivity	Order/Penalty	5/09/90
The Michaelson Corp., Kossuth County (2)	Air Quality	Open Burning	Order/Penalty	5/09/90
Carroll Municipal Water Supply (4)	Drinking Water	Monitoring/Reporting-Organics	Order/Penalty	5/09/90
Licht Mobile Home Park, Dubuque (1)	Wastewater	Discharge Limits	Order	5/09/90
Jefferson Water Dept. (4)	Drinking Water	Monitoring/Reporting-Organics	Order/Penalty	5/11/90
New Providence, City of (2)	Wastewater	Discharge Limits	Amended Order	5/11/90
Triggs Trailer Corp., Belmond (1)	Drinking Water	Monitoring/Reporting-Bacteria	Amended Order	5/11/90
Brandon, City of (1)	Wastewater	Prohibited Discharge	Order	5/11/90
Duane and Victoria Woods and Willow Tree Investments, Inc. Massena (4)	Underground Tank	Remedial Action	Order	5/11/90
Donald R. Null, Clinton County (6)	Air Quality Solid Waste	Open Burning Illegal Disposal	Order/Penalty	5/14/90
Bridgestone/Firestone, Inc. Des Moines (5)	Wastewater Hazardous Condition	Prohibited Discharge Failure to Notify	Referred to AG	5/21/90
Lucas-Monroe County Sanitary Landfill and the City of Chariton (5)	Solid Waste	Operation Violations	Referred to AG	5/21/90
Garry Kollbaum, East Side Acres, Moville (3)	Drinking Water	MCL - Nitrate	Referred to AG	5/21/90

Name, Location and Field Office Number	Program	Alleged Violation	Action	Date
Oberheus Restaurant, Waverly (1)	Drinking Water	Monitoring/Reporting-Bacteria and Nitrate Public Notice	Order/Penalty	5/23/90
Alden Water Supply (2)	Drinking Water	Public Notice	Order/Penalty	5/23/90
Olin Water Supply (1)	Drinking Water	Public Notice	Order/Penalty	5/23/90
West Des Moines Water Works (5)	Drinking Water	Public Notice	Order/Penalty	5/23/90
Brayton Water System (4)	Drinking Water	Public Notice	Order/Penalty	5/23/90
Toledo Water Supply (5)	Drinking Water	Public Notice	Order/Penalty	5/23/90
Winter Mobile Home Park, New Hampton (1)	Drinking Water	Public Notice	Order/Penalty	5/23/90
Batavia Water Supply (6)	Drinking Water	Public Notice	Order/Penalty	5/23/90
Sheldon Water Dept. (3)	Drinking Water	Public Notice	Order/Penalty	5/23/90
Alta Vista Water Dept. (1)	Drinking Water	Public Notice	Order/Penalty	5/23/90
Hilltop Mobile Home Park, Iowa City (6)	Drinking Water	Public Notice	Order/Penalty	5/23/90
Grand Vu Mobile Home Park, Tripoli (1)	Drinking Water	Public Notice	Order/Penalty	5/23/90
Greenfield Plaza Benefited Water Dist.,Des Moines (5)	Drinking Water	Public Notice	Order/Penalty	5/23/90
Breda Water Supply (4)	Drinking Water	Public Notice	Order/Penalty	5/23/90
Maple Crest Motel and Mobile Home Park, Mason City (2)	Drinking Water	Public Notice	Order/Penalty	5/24/90

Summary of Administrative Penalties

The following administrative penalties are due:

NAME/LOCATION	PROGRAM	AMOUNT	DUE DATE
Handi-Klasp, Inc. (Webster City)	WW/HC	1,000	8-02-88
Stockport Water Supply	WS	260	6-13-90
Merle (Toby) Buchan (Perry)			
Paul Kloberdanz d/b/a The Mart (Danville)	UT	1,000	6-18-90
*James R. Morrow, d/b/a Morrow Sawmill (Wayland)	AQ/SW	100	6-20-90
North Liberty Water, Inc. (Kalona)	WS	245	6-20-90
*Gilbert John Fjone (Swaledale)	SW	350	6-22-90
Farmegg Products (Humboldt)	WS	215	7-04-90
Park Village Apartments (Waverly)	WS	200	7-04-90
Meadow Lane Mobile Home Park (Denver)	WS	200	7-04-90
Irvin Lange (Alden)	AQ	1,000	7-04-90
Mason City Water Supply	WS	200	7-09-90
Carroll Municipal Water Supply	WS	200	7-14-90
Jefferson Water Dept.	WS	200	7-15-90
Donald R. Null (Clinton Co.)	AQ/SW	1,000	7-15-90
Geneva Grain & Lumber, Inc. (Franklin Co.)	WW/SW	1,000	7-21-90
West Des Moines Water Works	WS	200	7-24-90
Oberheus Restaurant (Waverly)	WS	330	7-24-90
Olin Water Supply	WS	200	7-25-90
Winter Mobile Home Park (New Hampton)	WS	200	7-25-90
Batavia Water Supply	WS	200	7-25-90
Sheldon Water Department	WS	200	7-25-90
Alta Vista Water Department	WS	200	7-25-90
Grand Vu Mobile Home Park (Tripoli)	WS	200	7-25-90
Breda Water Supply	WS	200	7-25-90
Maple Crest Motel and MHP (Mason City)	WS	350	7-26-90
Greenfield Plaza Benefited Water Dist. (Des Moines)	WS	200	7-26-90
Brayton Water System	WS	200	7-26-90
Alden Water Supply	WS	200	7-29-90
Toledo Water Supply	WS	200	7-29-90
Hilltop Mobile Home Park (Iowa City)	WS	200	7-30-90
Troy Mills Dam Assn. (Troy Mills)	FP	300	-----
The Michaelson Corp. (Kossuth Co.)	AQ	600	-----

*On Payment Schedule

The following cases have been referred to the Attorney General:

NAME/LOCATION	PROGRAM	AMOUNT	DUE DATE
OK Lounge (Marion)	WS	448	11-01-87
Richard Davis (Albia)	SW	1,000	2-28-88
McCabe's Supper Club (Burr Oak)	WS	335	12-14-88
Eagle Wrecking Co. (Pottawattamie Co.)	SW	300	5-07-89
*Twelve Mile House (Bernard)	WS	119	5-20-89
*Lawrence Payne (Ottumwa)	SW	425	6-19-89
Stan Moser (Hudson)	SW	250	6-27-89
Richard Kleindolph (Muscatine)	SW	500	8-17-89
Robert Fisch (Manchester)	AQ	600	9-01-89
William L. Bown (Marshalltown)	SW	1,000	10-01-89
Nozey & Mildred Habhab/John F. Constable (Ft. Dodge)	AQ	1,000	10-17-89
Timber Lake Estates (Swisher)	WS	100	1-01-90
Darlo Schaap (Sioux Center)	SW	600	1-14-90
Stringtown Country Cafe (Lenox)	WS	200	2-01-90
Wellendorf Trust (Algona)	AQ/SW	460	2-12-90
Donald P. Ervin (Ft. Dodge)	SW	1,000	3-05-90
R. J. Kool, Co. (Cedar Rapids)	SW	600	3-23-90
East Side Acres (Moville)	WS	200	12-26-89
East Side Acres (Moville)	WS	600	4-01-90

The following administrative penalties have been appealed:

NAME/LOCATION	PROGRAM	AMOUNT
AMOCO Oil Co. (Des Moines)	UT	1,000
Iowa City Regency MHP	WW	1,000
Thomas E. Lennon (Barnum)	FP	700
Great Rivers Coop (Atavia)	HC	1,000
1st Iowa State Bank (Albia)	SW	1,000
Cloyd Foland (Decatur)	FP	800
City of Marcus	WS	1,000
Superior-Ideal, Inc. (Oskaloosa)	WW	1,000
IBP, inc. (Columbus Junction)	WW	600
Fred's 66 (Davenport)	HC	1,000
King's Terrace Mobile Home Court (Ames)	WW	1,000
King's Terrace Mobile Home Court (Ames)	WS	315
Premium Standard Farms, Inc. (Boone Co.)	WW/AQ	700
Amoco Oil Co. (West Des Moines)	UT	1,000
Circle Hill Farms, Ltd. (Ellsworth)	SW	600
Cozy Cafe (Lucas)	WS	500
Stone City Iron & Metal Co. (Anamosa)	AQ	1,000
Craig Natvig (Cerro Gordo Co.)	SW	750
Manson Water Supply	WS	500
Ruth Ann Coe (Mason City)	AQ/SW	1,000
Joe Villinger (West Point)	SW	500
Midwest Mining, Inc. (Harrison Co.)	FP	800
Holiday Lake Water System Ltd. (Brooklyn)	WS	700
Rasch Construction, Inc. (Ft. Dodge)	AQ	1,000

*On Payment Schedule

American Meat Protein Corp. (Lytton)	WW	1,000
Fred Calabro (Pottawattamie Co.)	SW	1,000
Victor Carlson (Ft. Dodge)	AQ	1,000
Lytton, City of	WW	1,000
College Springs Water Supply	WS	600
Gerald Reimer (Clayton County)	SW	600
Louisa Courts (Muscatine)	WS	400
Robert E. Zezulka (Allamakee Co.)	SW	1,000
Orchard, City of	WW	1,000
Harcourt Water Supply	WS	500
Sioux City, City of	WW	1,000
Donald Ray Maasdam (Pocahontas Co.)	SW	1,000
Vern Starling (Boone Co.)	SW	1,000
Webster Co. Solid Waste Comm. (Webster Co.)	SW/AQ	1,000
Des Moines, City of	HC	1,000
Carl A. Burkhart d/b/a American Wrecking Co.	AQ/SW	1,000
Van Dusen Airport Services (Des Moines)	HC	1,000
Des Moines, City of	WW	1,000
Carroll Country Club (Carroll)	WS	215

The following administrative penalties were paid last month:

NAME/LOCATION	PROGRAM	AMOUNT
George J. Heitland (Franklin Co.)	SW	300
Clayton King (Mason City)	AQ	380
Melvin, City of	WS	215
*James R. Morrow d/b/a Morrow Sawmill (Wayland)	AQ/SW	100
*Gilbert John Fjone (Swaledale)	SW	50
Corwith Water Supply	WS	100
Lakewood Utilities (Ft. Dodge)	WS	150
Land O' Lakes, Inc. (Ellsworth)	WW	1,000
Soo Line Railroad Company (Mason City)	HC	500
	TOTAL	$2,795

The $1,000 penalty assessed to Howard McKee has been suspended.

The $200 penalty assessed Spring Grove Mobile Home Park (Burlington) has been rescinded.

The $215 penalty assessed Triggs Trailer Corporation (Belmond) has been rescinded.

*On Payment Schedule

DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION COMMISSION
ATTORNEY GENERAL REFERRALS
June, 1990

Name, Location and Region Number	New or Updated	Program	Alleged Violation	DNR Action	Status	Date
Aidex Corporation Council Bluffs (4)		Hazardous Waste	Release of Hazardous Substances	Referred to Attorney General	Referred EPA suit filed State intervention Motion to dismiss granted/denied Filed interlocutory appeal Decision in favor of govt.	12/16/82 02/26/87 03/05/87 02/26/88 03/11/88 04/04/89
Algona, City of (2)		Wastewater	Municipal Improvement Plan	Order	Referred	03/20/90
William L. Bown Marshalltown (5)		Solid Waste	Open Burning	Order/Penalty	Referred Petition Filed	11/20/89 03/03/90
Bozarth and Bell, Inc. Davenport (6)		Solid Waste	Open Dumping	Order	Referred Default Judgment $7500 Second Lawsuit Filed Consent Decree Filed New Case Trial Set	02/20/87 06/22/87 08/07/88 08/23/88 11/01/88 06/28/90
Bridgestone/Firestone, Inc. Des Moines (5)	New	Wastewater Hazardous Condition	Prohibited Discharge Failure to Notify	Referred to Attorney General	Referred	05/21/90
Carolan, Don & Hanson Tire Service, Cresco (1)		Solid Waste Air Quality	Open Dumping Open Burning	Referred to Attorney General	Referred	02/20/90
CARP vs. DNR		Wastewater	IBP Permit	Amended Permit	Suit Filed Dismissed Order Granting Reinstatement Stay Request Withdrawn	05/20/88 01/01/90 03/27/90 04/13/90
Clear Lake Sanitary District (2)		Wastewater	Compliance Schedule	Referred to Attorney General	Referred	04/16/90
Cerro Gordo County Area Landfill Agency (2)		Solid Waste	Cover Violations	Referred to	Referred	04/16/90
Chalfant, Milo, et.al. Webster City (2)		Solid Waste	Open Dumping	Order/Penalty	Referred	09/20/89
Clinton Pallet Co. Clinton (6)	Updated	Solid Waste	Open Dumping	Referred to Attorney General	Referred Suit Filed Default Judgment	06/21/89 11/09/89 04/ /90

DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION COMMISSION
ATTORNEY GENERAL REFERRALS
June, 1990

Name, Location and Region Number	New or Updated	Program	Alleged Violation	DNR Action	Status	Date
Cooper, Kenneth/Hunter Oil Minburn (5)		Storage Tank	Spill Cleanup	Order	Cooper Referred Hunter Referred Site Assessment DNR Review	08/17/88 02/ /90 04/20/90
Davis, Richard & Sonja (5)		Solid Waste	Open Unpermitted Dumping	Referred to Attorney General	Referred Suit Filed Default Judgement Filed Motion to Deny Default Motion Overruled	06/22/88 08/11/88 04/21/89 06/14/89 10/04/89
Jimmy Dean Meat Co., Inc. (5)		Wastewater	Pretreatment	Referred to Attorney General	Referred	04/16/90
Dexter Co., The Fairfield (6)		Wastewater	Prohibited Discharge Effluent Limit Discharge	Referred to Attorney General	Referred	03/20/90
Don Ervin, Webster County (2)		Solid Waste	Operation Without Permit	Order/Penalty	Referred	04/16/90
Fairfield, City of (6)		Wastewater	Monitoring/Reporting Discharge Limitation Operation Violation	Order	Referred	02/20/90
Giametta, Dominic d/b/a Fred's 66, Davenport (6)		Underground Tank	Remedial Action	Order/Penalty	Referred	12/11/89
Eagle Wrecking Co. Pottawattamie Co. (4)		Solid Waste	Open Dumping	Order/Penalty	Referred Bankruptcy Claim Filed	06/21/89 07/24/89
Ellsworth, City of (2)	Updated	Wastewater	Discharge Limits	Order	Referred Referral Withdrawn by DNR	04/18/89 05/30/90
Robert Fisch Manchester (1)		Air Quality	Open Burning	Order/Penalty	Referred Motion for Summary Judgment Judgment for $600	10/24/89 12/05/89 02/27/90
Gilbert Fjone Swaledale (2)		Solid Waste	Open Dumping	Order/Penalty	Referred	10/24/89
Habhab, Nozey et.al., Fort Dodge, (2)	Updated	Air Quality	Open Burning	Order/Penalty	Referred Hearing Set Judgment Entered	01/17/90 05/07/90 05/17/90
Humboldt Co. Landfill Commission (2)		Solid Waste	Cover Violations	Order/Penalty	Referred	11/20/89
Iben, Fred Monticello (1)		Solid Waste	Open Dumping	Order	Referred Petition Filed	11/20/89 04/20/90
Jorgenson, Harris (2)		Air Quality	Operation Without Permit	Referred to Attorney General	Referred	04/16/90
Richard Kleindolph Muscatine (6)		Solid Waste	Open Dumping	Order/Penalty	Referred Petition Filed	10/24/89 04/06/90
Garry Kollbaum East Side Acres Moville	New	Drinking Water	MCL-Nitrate	Order/Penalty	Referred	05/21/90
R. J. Kool Co., Cedar Rapids (1)	Updated	Solid Waste	Illegal Disposal	Order/Penalty	Referred Penalty Paid	04/16/90 05/30/90
Lakeshore Drive, Inc. et.al. Osceola (5)		Flood Plain	Reconstruction	Order	Referred Petition Filed Judgment vs. Lakeshore	11/20/89 02/07/90 04/09/90
Land O'Lakes, Inc. Ellsworth (2)	Updated	Wastewater	Prohibited Discharge	Referred to Attorney General	Referred Petition Filed Consent Order ($50,000)	09/20/89 11/30/89 05/30/90
Larson, Daryl, D.V.M. Audubon (4)		Wastewater	Prohibited Discharge	Referred to Attorney General	Referred	11/20/89
Lucas-Monroe County Sanitary Landfill, Chariton, City of	New	Solid Waste	Operation Violations	Referred to Attorney General	Referred	05/21/90
Mathern, Larry (Larry's DX) Ralph Beck; Walker Oil Co. (5)		Underground Tank	Remedial Action	Referred to AG	Referred	02/20/90

DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION COMMISSION
ATTORNEY GENERAL REFERRALS
June, 1990

Name, Location and Region Number	New or Updated	Program	Alleged Violation	DNR Action	Status	Date
Mike McGinnis, Alfred Patten and Dennis Lewis Pottawattamie Co. (4)		Solid Waste	Open Dumping	Referred to Attorney General	Referred Suit Filed	10/24/89 11/15/89
Mercy Hospital Medical Center (5)	New	Solid Waste	Illegal Disposal	Referred to Attorney General	Referred	04/16/90
Miller Products Co. (5)		Wastewater	Pretreatment	Order/Penalty	Referred	04/16/90
Monfort, Inc. (5)		Wastewater	Prohibited Discharge	Referred to Attorney General	Referred	12/11/89
Moser, Stan		Solid Waste	Open Dumping	Referred to Attorney General	Referred Petition Filed Trial Set Court Order	07/19/89 09/12/89 03/15/90 01/24/90
J.R. Nylen, Limited Sioux City (3)	Updated	Solid Waste Air Quality	Open Dumping Open Burning	Referred to Attorney General	Referred Consent Decree ($5,000)	03/20/90 05/30/90
Osceola, City of (5)		Wastewater	Prohibited Discharge	Referred to Attorney General	Referred	04/16/90
Pruess v. IDNR	Updated	Hazardous Condition	DNR Defendant	Abatement Order	Suit Filed Hearing DNR Motion to Dismiss Hearing	04/24/90 04/30/90 05/14/90 05/15/90
Regional Environmental Improvement Commission in Iowa County (6)		Solid Waste	Operational Violations	Referred to Attorney General	Referred	01/17/90
Sani-Wash Corporation Clinton (6)		Wastewater	Prohibited Discharge	Referred to Attorney General	Referred	08/23/89
Schaap, Darlo Sioux Center (3)		Solid Waste	Open Dumping	Order/Penalty	Referred	02/20/90
Schultz, Albert and Iowa Iron Works Ely (1)		Solid Waste	Open Dumping	Referred to Attorney General	Referred	09/20/89
Sevig, Gordon, et.al. Walford (1)		Wastewater	Prohibited Discharge	Referred to Attorney General	Referred	09/20/89
Siouxland Quality Meat Co., Inc. Sioux City (3)		Wastewater	Discharge Limitations	Referred to Attorney General	Referred	02/20/90
Stickle Enterprises, Ltd. et.al., Cedar Rapids (6)		Air Quality	Open Burning	Referred to Attorney General	Referred Suit Filed	09/20/89 10/17/89
Stringtown Country Cafe, Lenox (4)		Drinking Water	Monitoring/Reporting-Nitrate	Order/Penalty	Referred	03/20/90
Timber Lake Estates, Swisher (6)		Drinking Water	Monitoring/Reporting	Order/Penalty	Referred	02/20/90
Touchdown Co., et. al., Webster City (2)		Underground Tank	Prohibited Discharge Failure to Report Hazardous Condition	Referred to Attorney General	Referred	06/21/89
Turner, Ken Ft. Madison (6)		Solid Waste	Open Dumping	Referred to Attorney General	Referred Petition Filed Trial Conference	06/21/89 09/13/89 05/07/90
Walterman Implement, Inc. (2)		Underground Tank	Failure to Register	Referred to Attorney General	Referred	02/20/90
Wellendorf Trust and Lamont Wellendorf, Algona (2)		Air Quality Solid Waste	Open Burning Open Dumping	Order/Penalty	Referred	03/20/90
Wright County Area Landfill Authority (2)		Solid Waste	Cover Violations	Order/Penalty	Referred	03/20/90
Yocum, Max Johnson (6)		Flood Plain	Prohibited Construction	Defending Referred to Attorney General	Suit Filed Referred Counter Claim Filed Trial Held Judgment for Department Court of Appeals Affirmed Judgment Further Review Denied	12/18/84 07/12/85 10/85 6/16/87 8/18/87 11/29/88 02/06/89

DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION COMMISSION
CONTESTED CASES
June, 1990

DATE RECEIVED	NAME OF CASE	ACTION APPEALED	PROGRAM	ASSIGNED TO	STATUS
1-23-86	Oelwein Soil Service	Administrative Order	WW	Landa	Hearing continued.
6-12-86	ADM - Clinton	Administrative Order	Air	Landa	Settlement proposed. Consent order prepared.
12-03-86	City of Waukee	Administrative Order	WS	Hansen	Construction completed.
5-12-87	Iowa City Regency MHP	Administrative Order	WW	Hansen	Hearing held 11-03-87.
6-11-87	Thomas Lennon	Administrative Order	FP	Clark	Appealed to District Court.
8-10-87	Great Rivers Co-op	Administrative Order	HC	Landa	Final report approved. Settlement proposed.
1-15-88	First Iowa State Bank	Administrative Order	SW	Kennedy	Stipulation filed, briefs due 6/22/90.
2-04-88	Beaverdale Heights, Woodsman; Westwood Hills	Administrative Order	WS	Landa	Compliance actions completed.
2-05-88	Warren County Brenton Bank	Administrative Order	UT	Landa	Phase II completed. Report submitted.
3-01-88	Cloyd Foland	Administrative Order	FP	Clark	Appealed to Supreme Court.
4-13-88	Land O'Lakes, Inc.	Administrative Order	WW	Murphy	Dismissed.
5-16-88	Marcus, City of	Administrative Order	WS	Landa	Compliance achieved/Settlement proposed.
7-01-88	Superior Ideal, Inc.	Administrative Order	WW	Hansen	Hearing continued pending settlement discussions.
7-25-88	Nishna Sanitary Service, Inc.	Permit Conditions	SW	Landa	Compliance initiated/Plans submitted/reviewed.
8-03-88	Hardin County	Permit Conditions	SW	Landa	Compliance initiated/Plans submitted/reviewed
10-03-88	IBP, Columbus Junction	Administrative Order	WW	Clark	Hearing held 4/25/90; Briefs due 6/06/90.
10-20-88	Worth Co. Co-Op Oil Northwood Cooperative Elevator Sunray Refining and Marketing Co.	Administrative Order	HC	Landa	Compliance initiated.
12-02-88	Davis Co. Board of Supervisors	Administrative Order	AQ	Landa	Hearing continued.
1-25-89	Amoco Oil Co. - Des Moines	Administrative Order	UT	Landa	Settlement proposed. Clean up progressing.
2-10-89	Northwestern States Portland Cement Company	Site Registry	HW	Landa	Settlement proposed.
2-10-89	Baier/Mansheim/Hoyer	Site Registry	HW	Landa	Hearing continued/Settlement proposed.
2-13-89	King's Terrace Mobile Home Court	Administrative Order	WW	Murphy	Negotiating before filing.
2-13-89	King's Terrace Mobile Home Court	Administrative Order	WS	Murphy	Negotiating before filing.
2-16-89	John Deere Co. - Dubuque	Site Registry	HW	Landa	Hearing continued/Stipulation prepared.
2-16-89	Premium Standard Farms	Administrative Order	WW/AQ	Murphy	Hearing continued.
3-14-89	Dannie R. Hoover and Bill Edwards	Flood Plain Permit Issuance	FP	Clark	Proposed decision 4/11/90; EPC remand to DIA.
5-01-89	Amoco Oil Company - West Des Moines	Administrative Order	UT	Landa	Compliance initiated.
6-08-89	Shaver Road Investments	Site Registry	HW	Landa	Hearing continued/Discovery initiated.
6-08-89	Hawkeye Rubber Mfg. Co.	Site Registry	HW	Landa	Hearing continued/Discovery initiated.
6-08-89	Lehigh Portland Cement Co.	Site Registry	HW	Landa	Hearing continued/Discovery initiated.
6-08-89	Jay Winders	Permit Denial	FP	Clark	Settlement proposed.
6-12-89	Amana	Site Registry	HC	Landa	Negotiating before filing.
6-19-89	Grand Mound, City of	Administrative Order	WW	Hansen	Order to be amended.
6-22-89	Chicago & Northwestern Transportation Co. Hawkeye Land Co. Blue Chip Enterprises	Administrative Order	HC	Landa	Hearing held/Briefs filed/Reply briefs due.
7-11-89	Circle Hill Farms, Ltd.	Administrative Order	SW	Kennedy	Settlement pending.
7-19-89	Lehigh Portland Cement Co.	Administrative Order	HC	Landa	Settled.
7-26-89	Cozy Cafe	Administrative Order	WS	Hansen	Settlement offer made.
7-26-89	Midland Brick	Administrative Order	AQ	Landa	Compliance initiated.
9-01-89	Stone City Iron & Metal	Administrative Order Permit Denial	AQ	Kennedy	Settlement pending.
9-09-89	Monsanto	Site Registry	HC	Landa	Settlement proposed.
10-12-89	Electro-Coatings, Inc.	Administrative Order	HC	Landa	Settlement proposed.
10-24-89	Farmers Cooperative Elevator Association of Sheldon	Site Registry	HC	Landa	Negotiation proceeding.
10-24-89	Consumers Cooperative Association	Site Registry	HC	Landa	Negotiation proceeding.
10-26-89	Craig Natvig	Administrative Order Flood Plain	SW	Kennedy	EPC affirmed decision.

DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION COMMISSION
CONTESTED CASES
June, 1990

DATE RECEIVED	NAME OF CASE	ACTION APPEALED	PROGRAM	ASSIGNED TO	STATUS
11-01-89	Sam Levine/Morris Levine	Site Registry	HC	Landa	Negotiating before filing.
11-03-89	Bridgestone/Firestone, Inc.	Site Registry	HC	Landa	Hearing continued pending negotiations.
11-15-89	Alcoa	Site Registry	HC	Landa	Hearing continued.
11-17-89	Aten Services, Inc.	Administrative Order	SW/UT	Landa	Compliance initiated.
11-27-89	Manson, City of	Administrative Order	WS	Hansen	Negotiating before filing.
12-11-89	Leo Schachtner	Issuance	FP	Clark	Hearing set for 7/25/90.
12-21-89	Robert Coppinger and Velma Nehman	Flood Plain Permit Denial	FP	Clark	Proposed decision 5/17/90.
1-02-90	Midwest Mining, Inc.	Administrative Order	FP	Clark	Negotiating before filing.
1-03-90	Victor Carlson	Flood Plain Permit Administrative Order	AQ	Clark	Hearing held 5/23/90.
1-04-90	Joe Villinger	Administrative Order	SW	Kennedy	Negotiating before filing.
1/08-90	Northwestern State Portland Cement Co.	Permit Amendment	WW	Landa	Sent DIA.
1-10-90	Ruth Ann Coe	Administrative Order	AQ SW	Kennedy	Hearing held 5/18/90, proposed decision 5/25/90
1-18-90	Midland Fly Ash and Materials	Permit Variance Denial	SW	Landa	Hearing set for 8/7/90.
2-07-90	Jerry Jones	401 Denial	WW	Murphy	Sent to DIA.
2-13-90	Kenneth M. Rasch, d/b/a Rasch Construction, Inc.	Administrative Order	AQ	Kennedy	Negotiating before filing.
2-15-90	Holiday Lake Water System, Ltd.	Administrative Order	WS	Hansen	Submittal by facility under review by EPC.
2-15-90	Fred Calabro	Administrative Order	SW	Kennedy	Hearing continued.
2-19-90	American Meat Protein Corp. and Lytton, City of	Administrative Order	WW	Hansen	Hearing set for 8/1-2/90.
3-05-90	Gerald Reimer	Administrative Order	SW	Kennedy	Negotiating before filing.
3-05-90	College Springs, City of	Administrative Order	WS	Hansen	Settlement offer made.
3-12-90	Louisa Courts	Administrative Order	WS	Hansen	Hearing set for 6/15/90
3-14-90	Robert E. Zezulka	Administrative Order	SW	Kennedy	Negotiating before filing.
3-20-90	Kaneb Pipeline Co.	Administrative Order	HC	Landa	Hearing set for 7/18/90.
3-22-90	Arcadian Corporation	Permit conditions	WW	Hansen	Hearing set for 7/26/90.
3-22-90	Vern Starling	Administrative Order	SW	Kennedy	Negotiating before filing.
3-26-90	Loretta June Novak and Mr. and Mrs. Robert Booth, Jr.	Administrative Order	UT	Landa	Hearing continued.
3-27-90	Orchard, City of	Administrative Order	WW	Hansen	Negotiating before filing.
4-18-90	Harcourt, City of	Administrative Order	WS	Hansen	To be sent to DIA.
4-23-90	Sioux City, City of	Administrative Order	WW	Hansen	Informal meeting held on 5/18/90.
4-26-90	Donald Ray Maasdam	Administrative Order	SW	Kennedy	Sent to DIA.
5-07-90	W.G. Block Co./Hoffman Silo Site	Site Registry	HW	Landa	Hearing set for 8/01/90.
5-08-90	Texaco Inc./Chemplex Company Site	Site Registry	HW	Landa	Hearing set for 8/13/90.
5-08-90	Webster Co. Solid Waste Commission	Administrative Order	SW/AQ	Kennedy	Sent to DIA.
5-09-90	Raccoon Valley State Bank	Administrative Order	HC	Landa	Hearing set for 8/10/90.
5-09-90	Square D Company	Site Registry	HW	Landa	Hearing set for 7/27/90.
5-09-90	Joe & Virginia Koester/ Donn & Donna Patience	Water Use Permit	WR	Clark	Hearing set for 8/06/90.
5-11-90	Carl A. Burkhart	Administrative Order	AQ/SW	Kennedy	Hearing set for 7/16/90.
5-14-90	Van Dusen Airport Services	Administrative Order	HC	Landa	Compliance initiated.
5-15-90	Des Moines, City of	Administrative Order	HC	Landa	Sent to DIA.
5-15-90	Des Moines, City of	Administrative Order	WW	Hansen	Sent to DIA.
5-24-90	Carroll, City of	Administrative Order	WS	Hansen	Negotiating before filing.

Discussion took place regarding various items in the reports.

Margaret Prahl indicated that she would like a report on Attorney General Referrals over six months old which have not had any action taken on them.

This was an informational item; no action was required.

STATE ENVIRONMENTAL REGULATIONS AND STRINGENCY CLAUSE

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

At the Commission's request, a briefing will be presented relative to those areas of environmental protection statute and regulations where the state is limited to adoption of standards not more stringent than federal regulations. The effect of these limitations will also be discussed.

Mr. Stokes explained stringency clauses in the Iowa Code which limit the state from being more restrictive than the federal government. clauses are found in the Code:

455B.105(3) - Although this general provision implies that the Commission could establish standards more stringent than the federal government; the specific provisions in the sections below, however, requires that the Commission not be more stringent.

455B.133(4) - Air Quality
455B.173(2) - Effluent Limits or Pretreatment Standards
455B.173(5) - Drinking Water
455B.420 - Hazardous Waste 455B.464 - Provides that the Director can provide an annual list of materials for Commission consideration and the Commission can adopt that list of hazardous wastes that are viewed to pose a health or environmental problem if land disposed.
455B.474 - Underground Storage Tanks
455B474(1)(f) - Interim Rules on groundwater monitoring
455B474(3)(d) - Interim Rules on groundwater monitoring
455B.474(7) - Restates that standards under (1)(f) and (3)(d) must be consistent with and not more stringent that regulations adopted by the federal government.

There are no stringency clauses in the solid waste area, but the state must show there is consistency with federal programs. There are also no similar provisions in the floodplain program or in the water rights withdrawal program.

Mr. Stokes explained each of these regulations and the effects of same.

This was an informational item; no action was required.

FINAL RULE--CHAPTER 109 AMENDMENT, SOLID WASTE DISPOSAL FEES

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

The Commission is asked to approve the attached rules for final adoption. These rules make changes required by changes to the Code of Iowa 455B.310.

Rule 109.1(1) is changed to state that tonnage fees received will be deposited in the solid waste account of the groundwater protection fund.

Rule 109.3 is amended to provide specific exemption from fee payment for sites limited to the disposal of construction and demolition waste, landscape waste, coal combustion waste, or foundry sand; and materials approved by the DNR for lining, capping, or constructing berms, dikes or roads on the site. Wastes not buried at the site, and salvaged or recycled as allowed by the landfill permit are also exempt from the fee.

Rule 109.4(2) is amended to state that beginning July 1, 1988 the tonnage fee will be $1.50 per ton and increase $0.50 each July 1 through 1992. Also, a new volume/weight conversion for contaminated soil (1 cubic yard = 2000 pounds) has been added.

Rule 109.5(2) is amended to explain the fee payment schedule. Fees will be paid quarterly on Jan 1, April 1, July 1, and October 1.

Rule 109.7 explains the penalty for delinquent payment. Departmental review revealed a need to clarify late payment provisions. The rule was amended to state that fees late for partial months will pay the full 2% penalty.

Three public hearings were held at Des Moines, Iowa City, and Atlantic. No written or oral comments were received on these rule revisions.

ENVIRONMENTAL PROTECTION COMMISSION [567]
Adopted Rule

Pursuant to the authority of Iowa Code section 455B.304, the Environmental Protection Commission adopts amendments to 567--Chapter 109. "Fees for Disposal of Solid Waste at Sanitary Landfills," Iowa Administrative Code. Notice of Intended Action was published in the Iowa Administrative Bulletin on April 18, 1990 as ARC 818A.

The Commission amends 567--Chapter 109 to conform to recent legislative changes including the addition of certain exclusions from the fee for landscape waste, coal combustion residues, and foundry sand at landfills which accept only those wastes, the increase in fees, and penalty changes. Item 5 amends rule 109.7 to conform penalties to changes made by the 1990 legislature.

The department held public hearings in Iowa City, Des Moines, and Atlantic. The department received no oral or written comments on the proposed rule changes.

The rules were amended after inter-departmental review. It was determined that the penalty for late fee remittance should be clarified. Therefore, 567--109.7 has been amended to indicate that fees late for partial months will be assessed the full 2% penalty fee.

These amended rules are intended to implement Iowa Code section 455B.310. These rules become effective August 15, 1990.

The following amendments are adopted.

ITEM 1. Amend subrule 109.1(1) as follows:

109.1(1) Authority Pursuant to Iowa Code sections ~~455B.309 and 455B.310~~, the department has authority to collect fees for the disposal of solid waste at sanitary landfills. ~~Moneys collected or received by the department shall be deposited in the state treasury to the credit of the groundwater fund.~~ All tonnage fees received by the department under this section shall be deposited in the solid waste account of the groundwater protection fund created under Iowa Code section 455E.11.1.

ITEM 2. Rescind rule 109.3 and replace it with new rule 109.3 as follows:

567--109.3(455B) Exclusions.

109.3(1) The fees specified in rule 109.4(455B) do not apply to solid waste disposal facilities with special permit provisions which limit the site to the disposal of construction and demolition waste, landscape waste, coal combustion waste, foundry sand or solid waste materials approved by the department for lining or capping or constructing berms, dikes or roads in the project.

109.3(2) Fees do not apply to wastes which will not be buried at a sanitary landfill, if such material is salvaged or recycled in accordance with the provisions of the landfill permit.

ITEM 3. Amend subrule 109.4(2) by rescinding paragraph 109.4(2)a and replace it with new subrule 109.4(2)a as follows:

(a) For the year beginning July 1, 1988, the tonnage fee is one dollar and fifty centers ($1.50) per ton of solid waste and shall increase annually in the amount of fifty cents ($.50) per ton through July 1, 1992.

Further amend subrule 109.4(2)c(1) by adding the following Type of Waste and Volume/Weight conversion after the "Construction and Demolition Waste" and before "Other," as follows:

Contaminated soil 1 cubic yard = 2000 pounds

Further amend subrule 109.4(2) by adding the following new paragraph e, as follows:

(e) A county in which a privately operated landfill accepts solid waste from outside of the county may charge an additional tonnage fee for the disposal of solid waste at the sanitary landfill which is not more than one hundred percent of the fee otherwise established in this section. The additional fee charged and the monies collected should be used exclusively for the development and implementation of alternatives to sanitary landfills or for costs incurred by the county to abate problems associated with the operation of the sanitary landfill.

ITEM 4. Amend subrule 109.5(2) as follows:

109.5(2) Manner, time, and place. ~~Fees and forms are due on April 15 for the previous calendar year.~~ Fees are to be paid on a quarterly basis. The fees will be due January 1, April 1, July 1, and October 1 for the previous quarter. The person shall present or mail the completed form with the appropriate fees to: Accounting, Department of Natural Resources, Henry A. Wallace Building, 900 East Grand, Des Moines, Iowa 50319.

ITEM 5. Amend rule 567--109.7(455B) as follows:

Failure to pay fees. If it is found that a person has failed to pay fees assessed by this chapter, the director will enforce the collection of the delinquent fees. A person required to pay fees as required by Iowa Code section 455B.310 who fails or refuses to pay fees by the due date shall be assessed a penalty of ~~15~~ 2% of the quarterly fee due to be assessed on January 2, April 2, July 2, October 2, and on the first day of each month thereafter, on a monthly basis until paid. The penalty shall be paid in addition to the fee due.

_____

Date

_____

Larry J. Wilson, Director

Mr. Stokes gave a brief explanation of the rules.

Motion was made by Margaret Prahl to approve Final Rule--Chapter 109 Amendment, Solid Waste Disposal Fees. Seconded by William Ehm. Motion carried unanimously.

NOTICE OF INTENDED ACTION--CHAPTER 39, REQUIREMENTS FOR PROPERLY PLUGGING ABANDONED WELLS

The rules in Chapter 39 describe the proper methods for plugging abandoned wells and implement Senate File 441 that was passed in 1989. The administrative rules review committee at its meeting

on April 12, 1990, voted to impose a seventy day delay on two specific sentences in the rule pertaining to filling materials approved for use below the static water level in Class 2 wells. The remainder of Chapter 39 became effective on April 25, 1990.

The two sentences included in the delay action, plus another sentence not included but having the same problem, need to be changed to include agricultural lime as an approved filling material to meet the requirements of the legislative provision.

The Commission is requested to approve publication of a Notice of Intended Action for a hearing to be held on July 31, 1990 in Des Moines.

ENVIRONMENTAL PROTECTION COMMISSION {567}
Notice of Intended Action

Pursuant to the authority of 1989 Iowa Code Supplement section 455b.190, the Environmental Protection Commission intends to amend Chapter 39, "Requirements for Properly Plugging Abandoned Wells", Iowa Administrative Code.

The proposed amendments are designed to conform with statutory provisions relating to the use of agricultural lime. The first two items involve amendments to two sentences that have been delayed by the Administrative Rules Review Committee for a period of seventy days beyond the scheduled effective date. The third item is similar.

Any interested person may file written comments or suggestions on the proposed amendments to the rules through July 31, 1990. Such written materials should be directed to Wayne Reed, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand, Des Moines, Iowa 50319-0034, FAX 515-281-8895. Persons are also invited to present oral or written comments at a public hearing which will be held on July 31, 1990 at 10:00 a.m. at the Wallace State Office Building in the fifth floor east conference room, 900 East Grand Avenue, Des Moines, Iowa.

Copies of the proposed rules may be obtained from the Records Section, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand, Des Moines, Iowa 50319-0034.

In accordance with Iowa Code section 17A.31, notice is hereby given that these rules may have an impact on small business.

These rules are intended to implement 1989 Iowa Code Supplement section 455B.190.

ITEM 1. Amend **subrule 39.8(3)**, second paragraph, first sentence, to read as follows:

Filling material consisting of sand, gravel, crushed stone, ~~or~~ pea gravel or agricultural lime shall be placed in the bottom of the well up to four feet below the static water level.

ITEM 2. Amend **paragraph 39.8(4)"a"**, second paragraph, first sentence, to read as follows:

Filling material consisting of pea gravel, crushed stone, ~~or~~ gravel or agricultural lime shall be placed from the bottom of the well up to ten feet below the bottom of the casing or confining layer, whichever is lower.

ITEM 3. Amend **paragraph 39.8(4)"c"**, first paragraph, second sentence to read as follows:

For the lowest aquifer, filling material consisting of pea gravel, crushed stone, ~~or~~ gravel or agricultural lime shall be placed from the bottom of the well up to ten feet below the bottom of the casing or confining layer, whichever is lower.

Date

Larry J. Wilson, Director

Mr. Stokes gave a brief explanation of the rules.

Motion was made by Nancylee Siebenmann to approve Notice of Intended Action--Chapter 39, Requirements for Properly Plugging Abandoned Wells. Seconded by Margaret Prahl. Motion carried unanimously.

NOTICE OF INTENDED ACTION--CHAPTER 61, WATER QUALITY STANDARDS - HUMAN HEALTH CRITERIA

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

The Commission is requested to approve the attached Notice of Intended Action for revisions to departmental rules. The

revisions add instream numerical criteria for the protection of human health associated with the consumption of fish and shellfish from Iowa waters. These human health criteria will compliment recently adopted criteria for aquatic life protection.

These rules propose using EPA derived numerical values to prevent a potential risk increase of:

1) Unacceptable physiological response to concentrations of non-carcinogenic parameters.

2) Increased cancer incidents of 1 in 100,000 for carcinogenic parameters. The numerical criteria for protecting human health are based on relationships between contamination of the water to the uptake of a pollutant which will occur in fish and shellfish. The human health criteria are proposed to be implemented similarly to the aquatic life chronic criteria for toxic parameters in that they will not be exceeded beyond the mixing zone.

This notice has been changed from the version presented at the May meeting for information in response to EPA comments. The first change is to the numerical criteria for the seven non-carcinogenic parameters. It was noted that the 1 in 100,000 risk value does not apply to non-carcinogens. The criteria have been reduced by a factor of 10 to match recommended national criterion values. The second change was to add to Class C waters the EPA recommended values for fish and water consumption. This added criteria for eleven parameters for Class C waters. The preamble of the notice and several paragraphs in the proposed rule have been rewritten to note the above changes.

Public hearings are proposed for Cedar Rapids, Des Moines, Sioux City.

(Rule is shown on the following 29 pages)

DRAFT 5/30/90 RT

ENVIRONMENTAL PROTECTION COMMISSION
Notice of Intended Action

Pursuant to the authority of Iowa Code sections 455B.105 and 455B.173, the Environmental Protection Commission for the Department of Natural Resources gives Notice of Intended Action to amend Chapter 60, "Scope of Title-Definitions-Forms-Rules of Practice," and 61, "Water Quality Standards".

The recent revisions which amended the numerical and narrative criteria of the water quality standards effective May 23, 1990, included new aquatic use protection designations for Iowa's various water bodies. However, with the U.S. Environmental Protection Agency's (EPA) new emphasis to encourage States to adopt instream criteria to protect human health, the Department of Natural Resources proposes to include human health criteria applicable to Iowa waters. The criteria would protect citizens from elevated levels of toxic pollutants due to the consumption of fish and shell fish caught in Iowa waters.

The Department has not developed the numerical criteria from toxicity testing data specific to Iowa, but rather used the EPA national guideline data and selected a probable risk level. For carcinogenic parameters, a risk level of 10^{-5} was selected. This represents the potential for an increase in a cancer incident from 70 years of consumption of an average of 6.5 grams of fish per day by a 70 kilogram individual. For non-carcinogenic parameters, the recommended EPA criteria was selected and represents a concentration to prevent specific physiological affects caused by excessive amounts of the pollutant. For Class C water, the EPA criteria for fish and water consumption were selected using the same considerations for carcinogenic and non-carcinogenic parameters as noted above. The EPA risk assessment used in deriving the numerical criteria assumes the relationships associated with pollutant concentrations in the waters and the resulting contamination of fish flesh.

The human health criteria, noted in Table 1, are proposed to be met at the boundary of the mixing zone following the same approach as for the chronic aquatic life criterion. The more stringent of the criteria will be met by the permit limits developed for the dischargers of the pollutants. Not all parameters included in Table 1 have human health criteria established by EPA.

Item 1 will add a definition for "human health criteria" in the rule 60.2 . As Item 2, subrule 61.2(1) will be expanded to provided guidance on the method to develop additional human health criteria, if needed, for parameters not included in Table 1. Items 3 and 4 will amend subrule 61.2(4) to provide that the human health criteria will be met at the boundary of the mixing zone. Item 5 will add a new subparagraph to 61.3(3)"b"(3) describing the basis for the human health criteria in Table 1. Item 6 will amend subrule 61.3(3), Table 1, by including the actual human health numerical criteria. The rule referenced document "Supporting Document for Iowa Water Quality Management

Plans" (Iowa Department of Water, Air and Waste Management, Chapter IV, July 1976, as revised on _____, 1990) will be revised to note the calculation approach to be followed in developing wasteload allocations and permit limits based on the human health criteria.

Any interested person may submit written suggestions or comments on the proposed rule changes through August 17, 1990. Such written materials should be directed to Ralph Turkle, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand, Des Moines, Iowa 50319-0034, of FAX # 515-281-8895. Persons who have questions may contact Ralph Turkle at (515)281-7025. Persons are also invited to present oral or written comments at public hearings which will be held on August 1, 1990 at 1:00pm in the auditorium of the Wallace State Office Building, 900 East Grand, Des Moines, Iowa, on August 2, 1990 at 7:00pm in the Sioux City Main Library, 529 Pierce St., Sioux City, Iowa, and at 7:00pm on August 7, 1990 in the Cedar Rapids Main Library, 500 1st Street SE, Cedar Rapids, Iowa.

These rules may have an impact upon small businesses.

Copies of these proposed rules may be obtained from Sarah Detmer, Records Center, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand, Des Moines, Iowa 50319-0034.

These rules are intended to implement Iowa Code Chapter 455B, Division III, Part I.

ITEM 1. Amend rule 60.2 (455B) by adding the following new definition:

"Human health criteria" means that level of pollution which, in the case of non-carcinogens, prevent adverse health effects in humans, and in the case of carcinogens, represent a level of incremental cancer risk of 1 in 100,000. The numerical criteria are based on the human consumption of an average of 6.5 grams of fish and shell fish per day by a 70 kilogram individual for a life span of 70 years.

ITEM 2. Amend subrule 61.2(1), third unnumbered paragraph, as follows:

Certain of the criteria are in narrative form without numeric limitations. In applying such narrative standards, decisions will be based on the U.S. Environmental Protection Agency's methodology described in "Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and their Uses," 1985 and on the rationale contained in "Quality Criteria for Water," published by the U.S. Environmental Protection Agency (1977), as updated by supplemental Section 304 (of the Act) Ambient Water Quality Criteria documents. To provide human health criteria for parameters not having numerical values listed in 61.3(3) Table 1, the required criteria will be based on the rationale contained in these EPA criteria documents. The human health criterion considered will be the value associated with the consumption of fish flesh and a risk factor of 10^{-5} for carcinogenic parameters. For non-carcinogenic parameters, the recommended EPA criterion will be selected. For Class C water, the EPA criteria for fish

and water consumption will be selected using the same considerations for carcinogenic and non-carcinogenic parameters as noted above.

ITEM 3. Amend 61.2(4), first unnumbered paragraph, to read as follows:

61.2(4) Regulatory mixing zones. Mixing zones are recognized as being necessary for the initial assimilation of point source discharges which have received the required degree of treatment or control. Mixing zones shall not be used for, or considered as, a substitute for minimum treatment technology required by subrule 61.2(3). The objective of establishing mixing zones is to provide a means of control over the placement and emission of point source discharges so as to minimize environmental impacts. Waters within a mixing zone shall meet the general water quality criteria of subrule 61.3(2). Waters at and beyond mixing zone boundaries shall meet all applicable standards and the chronic and human health criteria of subrule 61.3(3) Tables 1 and 3 for that particular water body or segment. A zone of initial dilution may be established within the mixing zone beyond which the applicable standards and the acute criteria of subrule 61.3(3) will be met. For waters designated under subrule 61.3(5), any parameter not included in Tables 1, 2 and 3 of subrule 61.3(3), the chronic and human health criteria, and the acute criterion calculated following subrule 61.2(1), will be met at the mixing zone and zone of initial dilution boundaries respectively.

ITEM 4. Amend 61.2(4) "c", to read as follows:

c. The stream flow used in determining wasteload allocations to assure compliance with the chronic and human health criteria of Table 1 will be that value contained at the boundary of the allowed mixing zone. This stream flow may not exceed the following percentages of the seven-day, ten-year low stream flow as measured at the point of discharge:

(1) Twenty-five percent for interior streams and rivers, and the

Big Sioux and Des Moines Rivers.

(2) Ten percent for the Mississippi and Missouri Rivers.

The stream flow in the zone of initial dilution used in determining effluent limits to assure compliance with the acute criteria of Table 1 may not exceed 10 percent of the calculated flow associated with the mixing zone.

ITEM 5. Amend 61.3(3)"b"(3) by adding the following third subparagraph:

3. The human health criteria represents the level of protection necessary, in the case of non-carcinogens, to prevent adverse health effects in humans, and in the case of carcinogens, to prevent a level of incremental cancer risk of not exceeding 1 in 100,000. Instream concentrations in excess of the human health criteria will be allowed only within the boundaries of the mixing zone.

ITEM 6. Amend 61.3(3) Table 1 as follows:

Table 1: Criteria For Chemical Constituents

(all values as micrograms per liter unless noted otherwise).

Human health criteria for carcinogenic parameters noted below

were based on the prevention of an incremental cancer risk of 1 in 100,000. For parameters not having a noted human health criteria, the U.S. Environmental Protection Agency has not developed final national guideline values. For non-carcinogenic parameters, the recommended EPA criterion were selected. For Class C water, the EPA criteria for fish and water consumption were selected using the same considerations for carcinogenic and non-carcinogenic parameters as noted above.

Parameter		Use Designations				
		B(CW)	B(WW)	B(LR)	B(LW)	C
Arsenic (III)	Chronic	200	200	1000	200	--
	Acute	360	360	1800	360	50
	Human Health	1.4	1.4	--	1.4	--
Barium	Acute	--	--	--	--	1000
Benzene	Acute	--	--	--	--	5
	Human Health	712.8	712.8	--	712.8	--
Cadmium	Chronic	1	15	25	1	--
	Acute	4	75	100	4	10
	Human Health+	168	168	--	168	--
Carbon Tetra-chloride	Acute	--	--	--	--	5
	Human Health	44.2	44.2	--	44.2	--
Chloride	Acute	--	--	--	--	250*
Chlordane	Chronic	.004	.004	.15	.004	--
	Acute	2.5	2.5	2.5	2.5	--
	Human Health	.006	.006	--	.006	.006
Chlorobenzene	Human Health+	20	20	--	20	20
Chromium (VI)	Chronic	40	40	200	10	--
	Acute	60	60	300	15	50
	Human Health+	3365	3365	--	3365	--
Copper	Chronic	20	35	55	10	--
	Acute	30	60	90	20	1000
	Human Health	10*	10*	--	10*	--
Cyanide	Chronic	5	10	10	10	--
	Acute	20	45	45	45	20
4,4'- DDT++	Human Health	.0059	.0059	--	.0059	.0059
para-Dichloro-benzene	Acute	--	--	--	--	75
	Human Health+	2.6*	2.6*	--	2.6*	--

Parameter		Use Designations B(CW)	B(WW)	B(LR)	B(LW)	C
3,3-Dichloro benzidine	Human Health	.2	.2	--	.2	.1
1,2-Dichloro-ethane	Acute	--	--	--	--	5
	Human Health	986	986	--	986	--
1,1-Dichloro-ethylene	Acute	--	--	--	--	7
	Human Health	32	32	--	32	--
Dieldrin	Human Health	.0014	.0014	--	.0014	.0014
2,3,7,8-TCDD (Dioxin)	Human Health	.00014***	.00014***	--	.00014***	.00013***
Fluoride	Acute	--	--	--	--	2000
Heptachlor	Human Health	.002	.002	--	.002	.002
Lead	Chronic	3	30	80	3	--
	Acute	80	200	750	80	50
Mercury (II)	Chronic	.05	.05	.25	.05	--
	Acute	6.5	6.5	10	2.5	2
	Human Health	1.5	1.5	--	1.5	--
Nitrate as NO3	Acute	--	--	--	--	45*
Nickel	Chronic	350	650	750	150	--
	Acute	3250	5800	7000	1400	--
	Human Health+	4584	4584	--	4584	607
Polychlorinated Biphenyles (PCBs)	Chronic	.014	.014	1	.014	--
	Acute	2	2	2	2	--
	Human Health	.0004	.0004	--	.0004	.0004
Polynuclear Aromatic Hydro-Carbons (PAHs)**	Chronic	.03	.03	3	.03	--
	Acute	30	30	30	30	--
	Human Health	.3	.3	--	.3	.028
Phenols	Chronic	50	50	50	50	--
	Acute	1000	2500	2500	1000	50
	Human Health	3000	3000	--	3000	--
Selenium (VI)	Chronic	10	125	125	70	--
	Acute	15	175	175	100	10
Silver	Chronic	2.5	8.5	8.5	.35	--
	Acute	30	100	100	4	50

Parameter		Use Designations				
		B(CW)	B(WW)	B(LR)	B(LW)	C
Toluene	Chronic	50	50	150	50	--
	Acute	2500	2500	7500	2500	--
	Human Health	3000*	3000*	--	3000*	101*
Total Residual Chlorine (TRC)	Chronic	10	20	25	10	--
	Acute	35	35	40	20	--
1,1,1-Trichloroethane	Acute	--	--	--	--	200
	Human Health+	173*	173*	--	173*	--
Trichloroethylene (TCE)	Chronic	80	80	80	80	--
	Acute	4000	4000	4000	4000	5
	Human Health	807	807	--	807	--
Vinyl Chloride	Acute	--	--	--	--	2
	Human Health	5250	5250	--	5250	--
Zinc	Chronic	200	450	2000	100	--
	Acute	220	500	2200	110	1000
	Human Health+	5000	5000	--	5000	--

*expressed as milligrams/liter
**to include the sum of known and suspected carcinogenic PAHs
***expressed as nanograms/liter
+Represents the non-carcinogenic human health parameters.
++The concentrations of 4,4'- DDT or its metabolites; 4,4'- DDE and 4,4'- DDD, individually shall not exceed the human health criterion.

Revised May 30, 1990

New Modifications to include Human Health Criteria
(Introduction and Pages 52, 74, A-14)

Modifications to Chapter IV - Basin Plan Support Document

The following is a brief description of the significant changes made in Chapter IV and the reasons for these changes. The changes begin on page 40 to the end of the document. There has not been any changes made to the water quality models or their procedures sections.

I. Modifications to the Wasteload Allocation Procedures.

The 1990 Water Quality Standards revisions have required numerous modifications to the previous wasteload allocation procedures. They include the introduction of the two number aquatic life criteria and a human health criteria, ammonia nitrogen criteria being a function of pH and temperature, more specific physical limitation to the mixing zone, the introduction of a zone of initial dilution, and a permit derivation procedure. These modifications will be discussed below.

A. Two Number Criteria. The new concept of using the two number aquatic life criteria for toxic pollutants and total residual chlorine represents the instream water quality values necessary to protect aquatic species from both acute and chronic toxicity in designated streams, rivers, lakes, and wetlands.

In addition to aquatic life criteria, the standards have incorporated a human health criteria for waters designated as Cold Water, Significant Resource, Limited Resource, Lakes & Wetlands, and Class C. For all the above designated waters except Class C, the human health criteria is to assure protection of human health due to the consumption of fish flesh. For Class C waters the new human health criteria is to assure protection of human health due to the consumption of fish flesh and water.

Therefore, the wasteload allocation procedure will now calculate three different values,

one for meeting the acute criterion and the others meeting the chronic criterion (aquatic and human health).

B. Physical Limitations of the Mixing Zone. The standards establish the physical dimensions and flow restrictions of the regulatory mixing zone. The specified length limitations of the mixing zone, the actual low stream flow, and associated width, contained at the boundary of the most restrictive length limitation provides the amount of diluting flow allowed in the wasteload allocation procedures. The chronic criteria (aquatic life) and the human health criteria contained in the water quality standards will be met at the boundary of the mixing zone through dilution with the available stream flow in the mixing zone.

For toxic parameters (Table 1 of the Water Quality Standards), the mixing zone shall not exceed 25% of the 7Q10 stream flow or protected flow. While for ammonia nitrogen (Table 3 of the Standards) the mixing zone flow is restricted based on the facilities dilution ratio. Dilution ration is the ratio of the 7Q10 stream flow or protected flow to the effluent design flow.

C. Zone of Initial Dilution. This new concept represents a small area within the mixing zone where dilution is allowed such that the acute criteria is met at the defined boundary of this zone of initial dilution. The dimension and stream flow of this zone is limited to 10% of the mixing zone for toxic parameters. For ammonia nitrogen the dimension and stream flow of this zone is limited to 10% of the mixing zone for facilities with a dilution ratio of greater than 2 to 1. For facilities with a dilution ratio equal to or less than 2 to 1, the dimension and stream flow of this zone is limited to 5% of the mixing zone.

D. Ammonia Nitrogen Criteria. The revised ammonia criteria reflects the above mentioned two number criteria approach being pH and temperature dependent. This dependency requires that the wasteload allocation procedures first incorporate the pH and temperature conditions occurring at low stream flow periods in selecting the

appropriate acute and chronic criteria. The wasteload allocations procedures then is calculated following the same procedure as for other toxics.

E. Prevention of Toxic Conditions in General Classified Streams. The 1989 water quality standards revisions further clarify the 'free from' statement applicable to all streams. This provisions states that all waters shall be free from substances attributable to wastewater discharges or agricultural practices in concentrations or combinations which are acutely toxic to humans, animal, or plant life. The wasteload allocation procedure to implement this provision will closely follow the existing approach by considering the laboratory toxicity data (96hr.LC_{50}) of the most sensitive aquatic specie present in the receiving stream. Typically a resident fish (minnow) species is selected.

II. Permit Derivation Procedure.

A new provision of the water quality standards requires that the wasteload allocation value, calculated to protect water quality standards, be mathematically modified prior to being included in NPDES permits as effluent limits. The mathematical modifications, based on EPA guidance documents, reflect the uncertainty of effluent sampling, analytical precision, and effluent monitoring frequency. This procedure, discussed in this Support Document, will only be applied to parameters warranting water quality based permit limits, not to technology based limits, such as secondary treatment or BAT/BPT.

The calculations of toxic wasteload allocations involves the incorporation of the 'regulatory' mixing zone and zone of initial dilution for each wastewater treatment facility, the design effluent flow rates, and the applicable acute and chronic water quality criteria. The determination of the mixing zone and zone of initial dilution are presented in a separate section. This Toxics section uses these defined zones and the corresponding flow in establishing the wasteload allocations for toxics.

1. Calculations: As noted in Subrule 61.2(4) of the Water Quality Standards, the chronic and human health criteria must be met at the boundary of the mixing zone and the acute criteria must be met at the boundary of the zone of initial dilution. The method for meeting these boundary conditions will be to use a simple mass balance of the pollutants.

$$(Q_z - Q_d)\ (C_u) + Q_d\ (C_d) = Q_z\ (C_s)$$

where:

Q_z = Stream flow in the mixing zone or zone of initial dilution (cfs)

Q_d = Discharge flow (cfs)

C_u = Background concentration (mg/l)

C_d = Discharge wasteload allocation (mg/l)

C_s = Applicable water quality standard (mg/l)

This equation is solved for C_d, with the results being a wasteload allocation for the protection of the acute criteria and two wasteload allocations for the protection of the chronic and human health criteria. The acute wasteload allocation value and the most restrictive of the chronic and human health criterion wasteload allocations are then carried forward to the Permit Derivation Procedures section.

C. Ammonia Nitrogen: Special consideration must be given to the calculations for a wasteload allocation for ammonia nitrogen. First, water quality

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have not been verified for Iowa stream and river conditions. Several alternative calculation approaches should be considered along with data generated from Part 316(a) studies.

Example distance calculations can be found in the U.S. EPA "Water Quality Assessment" document on pages 423 to 461.

The mixing zone cross sectional area and volume discussion above also applies to the calculations for thermal dischargers. The reduction of the percent of river area or volume in the mixing zone (below the 25% requirement) for the Mississippi and Missouri Rivers has additional justification when the heated plume influences the highly productive fish habitat areas and identified clam beds often located along the stream bank or near bank areas.

PERMIT DERIVATION PROCEDURE

Introduction. This section of the Support Document describes the method used to translate a wasteload allocation into an NPDES permit limit. The procedures are applied to any discharger in the state, municipal, industrial, or semi-public, for which a water quality-based permit limit is required. The purpose of these procedures are to provide an effluent limit which will statistically assure that the wasteload allocation will not be exceeded due to the variations in facility operation, monitoring and parameter analysis. The more restrictive of the acute, chronic or human health wasteload allocation will be used in the following calculations.

Iowa Permit Derivation Methods

The Iowa permit derivation methods, the simplified or the statistical based, are discussed below. The more lenient of the average and maximum permit limits from either of the procedures will be the recommended values for use in the permit process to assuring that water quality standards are met.

1. Simplified Procedure:

   Maximum Permit Limit = Wasteload Allocation (Acute, Chronic, or Human Health)

   Average Permit Limit = 0.67 x Wasteload Allocation

2. Statistical Based Procedure:

The statistical based procedure requires the following four input values to calculate the permit limits.

CV = Coefficient of Variation
MF = Monitoring Frequency, samples per month
AWLA = Acute Wasteload Allocation
CWLA = Chronic or Human Health Wasteload Allocation (most restrictive)

The CV value will be 0.60 unless applicable data is provided by the wastewater treatment facility. The monitoring frequency (MF)

Draft

FFY 90

FFY 90 WATER QUALITY STANDARDS REVISIONS

HUMAN HEALTH CRITERIA

ESTIMATED ECONOMIC IMPACTS AND BENEFITS

Prepared By:

Environmental Protection Division

June 1990

Iowa Department of Natural Resources
Larry J. Wilson, Director

FINAL DRAFT

FFY 90 WATER QUALITY STANDARDS REVISIONS

HUMAN HEALTH CRITERIA

ESTIMATED ECONOMIC IMPACTS AND BENEFITS

I. **Summary of Economic Assessment.** The proposed human health criteria will require approximately $ 2.28 Million to be spent in the next several years for the construction or upgrading at an four industrial wastewater treatment or pretreatment facilities. The few number of facilities affected by the human health criteria is due to the effectiveness of the aquatic criteria in also protecting human health concerns and the few number of facilities discharging high levels of toxic pollutants. These four facilities will be required to remove additional amounts of Arsenic from their effluent. This estimated costs will not be divided evenly among all treatment facilities requiring an upgrade, but with each individual facility having unique costs.

As an estimation of the differing facility costs, the following breakdown was developed.

> For industrial or the pretreatment facility required to provide additional Arsenic removal, an average estimated one time construction cost is $570,000 with an increase in operational costs of $145,000 per year. If the construction cost was to be paid over a 20 year period at an interest rate of 8.8%, the amortized construction cost for the facility would be $50,300 per year in addition to the $145,000 increased operational costs.

The construction costs will not occur concurrently for all facilities, rather it will depend on individual construction needs and schedules.

The associated economic benefit for the proposed rules is estimated to be $ 0.24 million annually for the 8 stream miles anticipated to experience a benefit.

II. **Introduction.** The economic impact and benefits for the proposed human health criteria water quality standards (WQS) are associated with the introduction of an additional instream criteria to be achieved at the boundary of the regulatory mixing zone. The identifiable economic impact will be to wastewater treatment facilities discharging parameters in amounts exceeding the capacity of the receiving stream while the identifiable benefit will be to the human consumers of the sport fisheries. Thus, this assessment will evaluate the impacts and benefits to the waters designated to protect a sport fisheries, the coldwater, significant resource warm water, and the lake/wetland waterbodies.

This economic assessment reflects the estimated construction costs to wastewater treatment facilities required to meet more stringent human health criteria. Associated with the construction costs is an estimation of the annual operational costs for the treatment of the toxic parameters. It is recognized that other associated cost may exist, such as, indirect construction costs, other operation and maintenance costs, and monitoring cost for effluent, sludge and contributing industries. However, these costs are difficult to estimate as they are more specific to the individual treatment processes selected to meet the required effluent limitations.

III. **Procedures of Determining Economic Assessment.** The economic assessment includes a projection of the impacts to wastewater treatment facilities discharging parameters associated with the human health criteria, and the benefit to consumers of fish caught in the rivers near the wastewater treatment facilities. An economic impact could not be developed specifically for all wastewater facilities in Iowa because of the lack of data regarding the presence in the facilities of many of the human health parameters. In addition, the economic benefit could not derived a total benefit due the complex nature of expressing the benefits to human health. Basic assumptions were made to facilitate obtaining a representative assessment within the staff resource constraints.

A. **Assumptions & Procedures for Economic Impact Calculations.** All Iowa wastewater treatment facilities presently permitted to discharge the human health parameters were selected to have specific economic impacts calculated. For all selected facilities, the human health wasteload allocation and permit limit was calculated following the procedure in the Chapter IV, Basin Plan Support Document.

1. **Selected Parameters.** Table 1 in the proposed rule revisions list the human health criteria developed by EPA for: 1). the toxic pollutants presently noted in the water quality standards, and 2). the pollutants currently permitted for Iowa dischargers. (Table 1 of the proposed rule revisions are included in this

assessment appendix as Table 1.) Eleven of the proposed human health criteria are less stringent than the aquatic life criteria (acute or chronic). Two of the proposed human health criteria are more stringent than the aquatic life criteria. Thirteen parameters have human health criteria proposed for which there are no EPA aquatic life criteria. It should be noted that human health criteria were not developed for four parameters for which aquatic life criteria are noted in Iowa's Water Quality Standards. This economic assessment will address those two parameters where the human health criteria is more stringent than the aquatic life criteria for the coldwater, significant resource warmwater, or lake/wetlands use designations. In addition the assessment will address the thirteen parameters where there were no aquatic life criteria as these have not been regulated in past water quality standards. (Table 2 in the Appendix presents the fifteen parameters being addressed.)

The economic assessment did not address these less stringent criteria as the economic impacts from the aquatic criteria were addressed in the development of the March 20, 1990 adopted Water Quality Standards. For details on the impacts from the aquatic life criteria, see the DNR document entitled 'FFY 89 Water Quality Standards, Estimated Economic Impacts and Benefits, January 1990, prepared by the Environmental Protection Division.

The economic impact will calculate the cost for the parameters which are being permitted for discharge into Iowa waters. A search of fifteen parameters permitted for all dischargers indicates that four of the human health criteria are being discharged by nine dischargers. These nine facilities will potentially be affected by the human health criteria. These four parameters include: Arsenic, Benzene, Chlorobenzene, and Trichloroethene (TCE).

2. **Selected Facilities.** The nine facilities selected presently are permitted to discharge the one or more of the fifteen parameters noted above. This group of facilities included: one machinery manufacture, one landfill leachate treatment, one metals refinery, one veterinary medicine formulator, two plastics formulator, an industrial pretreatment contributor to a city, and two groundwater clean up dischargers.

Non-descriptive labels are noted for each individual facility because of the tentative nature of the calculations. Individual facility limitations will be developed during the actual NPDES permit renewal

process using information not capable of being incorporated into this economic assessment.

3. **Wasteload Allocations.** The wasteload allocation (WLA) for each of the facilities was calculated following the procedure described in Chapter IV, Basin Plan Supporting Document, revised March 20, 1990. Each WLA represents the amount of pollutants which the receiving stream can assimilate without causing the water quality standards criteria to be exceeded. As noted in the proposed human health criteria rules, the criteria will be met at the boundary of the mixing zone for toxic pollutants.

   In calculating the WLA for each facility, the regulatory mixing zone flow was determined as; 1/4 of the stream's 7Q10 stream flow regime at each discharger on interior stream, and 1/10 of the Mississippi and Missouri River's 7Q10 flow.

   The proposed water quality standards notes other mixing zone restrictions for length and associated flow. However, for this economic assessment the maximum amount of stream flow in the mixing zone was used.

4. **Permit Limitations.** The water quality standards incorporates the EPA concept of statistically derived permit limits to assure that the water quality standards will not be exceeded due to fluctuations in effluent quality normally occurring in a facility. The water quality standards incorporates both a simplified and a statistical procedure. The simplified approach was used which establishes the daily maximum permit limit equal to the WLA and the monthly average permit limit equal to 67% of the maximum limit.

   Since the selected facilities currently have permit limits for the selected parameters, the human health based permit limits are compared to the present permit limits. It was assumed that a treatment facility will only be impacted by the proposed human health criteria if the human health based permit limit is more stringent than the present permit limit. Five of the original nine selected facilities are shown not to be impacted by the proposed human health criteria. The permit limits for each of the four facility affected by the proposed human health criteria are noted in Table 3.

5. **Economic Impact Calculation.** The economic impact calculation projects the construction costs necessary to be provided by a treatment facility to meet the calculated permit limits and an estimate of the annual operational cost. Because the human health parameters

are potentially impacting treatment facilities for Arsenic, the treatment methods vary with the pollutant, and the type of industry generating the waste or the ability of the city system to provide incidental removal. Entire treatment replacement is not anticipated to be necessary to meet the required permit limits. Individual waste stream treatment or additional treatment units added to existing facilities are the expected methods to achieve permit limits.

For this assessment, only Arsenic was found to need additional removal. For this pollutant, ion exchange was selected as the most particular process to remove the pollutant to the levels necessary to meet the permit limits.

Individual waste streams from each source of Arsenic should be treated prior to combination with other waste stream in an industrial complex. Since this assessment did not know the isolated waste stream within an industrial complex, the entire permitted flow was used in deriving the projected treatment costs. It is expected that a smaller waste stream than the entire facility flow would need the Arsenic treatment, thus potentially reducing the treatment cost for the particular industry or pretreatment facility.

The pretreatment facility is contributing industrial discharger to the municipality having the permit limits. Since the contributing flows from the pretreatment facility were not know it was assumed that a flow of 0.015 mgd would require Arsenic treatment.

The economic impact calculations for Arsenic removal, referenced the book Wastewater Treatment Technology, Patterson, J.W., 1978. Cost information from this reference was used for the type of treatment process applicable for removal of the pollutant. Specific ion exchange construction cost could not be found in the reference for Arsenic removal. The ion exchange costs for Copper removal were used as representative values.

The following are the costs from the reference used in the assessment.

Costs	Arsenic
Construction (range) $/1000 gal/day	1,740-5,220
Construction (midrange) $/1000 gal/day	3,480
Operational (range) $/1000 gal	1.34 - 3.52
Operational (midrange) $/1000 gal	2.43

All construction costs were updated to January 1990 dollars using the Engineering News Record index. Midrange cost values for construction and operations were used in conjunction with the facilities discharge flow rate to determine the projected costs. Table 4 denotes the needed treatment facility costs. Table 5 includes the estimated increase in annual operational costs to provide the additional level of metals removal.

The total capital construction costs for all facilities was $2.28 Million for the four facilities and pretreatment facilities potentially having a treatment need. To put this construction cost in terms of an annual cost, a 20 year pay back period was assumed at an interest rate of 8.8% (P/A factor = 0.1059). The total construction cost would equate to an annual cost of $0.24 Million. This figure includes only capital improvements to the industries and to the contributing industry to the municipality to comply with the revised effluent limits for the human health based permit limits. Table 5 notes the annual construction costs for each facility.

There will be undoubtedly an associated increase in the existing operation and maintenance (O&M) costs for industries and to the contributing industries to the municipality to meet the proposed limits. The referenced document provided a range of O&M costs for the pollutant removal. However, there may be other costs to all affected facilities which could not be readily identified and included in this assessment. The estimated O&M costs for all affected facilities is $0.580 Million as noted in Table 5.

To put these construction and operation costs into a facility perspective, Table 5 also presents the expected average costs for each facility, on an annual basis. These facility values represent the additional costs associated with financing and operating the required facility at such time as the construction and operation is started.

B. **Assumptions and Procedures For Economic Benefits.** The assessment of economic benefits followed a similar approach used in the 1989 economic assessment for Water Quality Standards revisions. While the 1989 revisions addressed different aspects of the standards, similar rationale and data sources were used in the present assessment. The benefits will address the principle aspect of the proposed human health criteria number criteria, i.e., protection of human health associated with the consumption of fish flesh.

The benefit from the human health criteria will be to reduced concentration of pollutants downstream of wastewater treatment facilities during all stream flow conditions such that the fish flesh will not be contaminated to levels which cause a risk during consumption. Extensive research and evaluation of potential human responses to trace amounts of pollutants in fish flesh has been made by EPA in developing the national guidelines for the human health criteria. This assessment of benefits will not attempt to incorporate the EPA evaluation to human responses. Nor will it attempt to assign a dollar value to human health and well being as they are very difficult to measure. A simpler approach was selected which followed the past water quality standards assessment where the benefit will be associated to the aquatic resources by assigning a worth or value to the period of time a user spent in the benefited stream segment. The lack of the human health criteria potentially implies that the human consumption of the aquatic resource (fish) will be impaired or eliminated due to tissue contamination. Thereby reducing or eliminating the worth of the stream not only in the mixing zone of the discharger, but also for a distance above and below the mixing zone where the fish may move.

The term used in this assessment for the worth of the resource are user days. Surveys performed by the department and consultants place a dollar value on each user day spent recreating or fishing along a stream. Based on the survey results, a conservative value or worth of $20.00 was used for each user day for the type of recreation being made on the stream.

Since the implementation of the human health criteria will have the most profound and direct benefit to the receiving stream upstream and directly downstream of wastewater treatment facilities, four different factors are included

in the calculations of stream benefits below treatment facilities; specific stream distances benefited for each facility in the subset, rate of recreational/fishing usage in each receiving stream, the length of the recreational season, and the user day dollar value.

The stream distance benefited below each facility, having a treatment need, was estimated as the distance sport fish may move within the stream receiving the wastewater discharge. The length of movement of sport fish was estimated as 2 miles as an average value for Iowa rivers. This equates to 8 stream miles for the four affected facilities.

To account for different rates of usage anticipated with the different sizes of the four receiving streams, staff estimated a average usage rate at these intensively used rivers of 25 user days/mile/week. These rivers undoubtedly have higher seasonal usage rates during peak fishing periods.

The season of active recreation/fishing on theses rivers was assumed to occur from April 1 to November 1, approximately 30 weeks. The product of the usage rate (user days/week/mile), the weeks per season, dollar value per user day, and the benefited miles provides the projected economic benefit for the receiving stream associated with the subset of facilities. Using this relationship, the annual benefit associated with the human health criteria for the four facilities needing upgrading is $0.24 Million. The statewide benefit

$$= 2(8)(\$20.00)(30)(25) = \$.24 \text{ Million.}$$

APPENDIX

Table 1
Criteria For Chemical Constituents

(all values as micrograms per liter unless noted otherwise).

Parameter		Use Designations				
		B(CW)	B(WW)	B(LR)	B(LW)	C
Arsenic (III)	Chronic	200	200	1000	200	--
	Acute	360	360	1800	360	50
	Human Health	1.4	1.4	--	1.4	--
Barium	Acute	--	--	--	--	1000
Benzene	Acute	--	--	--	--	5
	Human Health	712.8	712.8	--	712.8	--
Cadmium	Chronic	1	15	25	1	--
	Acute	4	75	100	4	10
	Human Health+	168	168	--	168	--
Carbon Tetra-chloride	Acute	--	--	--	--	5
	Human Health	44.2	44.2	--	44.2	--
Chloride	Acute	--	--	--	--	250*
Chlordane	Chronic	.004	.004	.15	.004	--
	Acute	2.5	2.5	2.5	2.5	--
	Human Health	.006	.006	--	.006	.006
Chlorobenzene	Human Health+	20	20	--	20	20
Chromium (VI)	Chronic	40	40	200	10	--
	Acute	60	60	300	15	50
	Human Health+	3365	3365	--	3365	--
Copper	Chronic	20	35	55	10	--
	Acute	30	60	90	20	1000
	Human Health+	1000	1000	--	1000	--
Cyanide	Chronic	5	10	10	10	--
	Acute	20	45	45	45	20
4,4'- DDT++	Human Health	.0059	.0059	--	.0059	.0059
para-Dichloro-benzene	Acute	--	--	--	--	75
	Human Health+	2.6*	2.6*	--	2.6*	--

Parameter		Use Designations B(CW)	B(WW)	B(LR)	B(LW)	C
3,3-Dichloro benzidine	Human Health	.2	.2	--	.2	.1
1,2-Dichloro- ethane	Acute	--	--	--	--	5
	Human Health	986	986	--	986	--
1,1-Dichloro- ethylene	Acute	--	--	--	--	7
	Human Health	32	32	--	32	--
Dieldrin	Human Health	.0014	.0014	--	.0014	.0014
2,3,7,8-TCDD (Dioxin)	Human Health	.00014***	.00014***	--	.00014***	.00013***
Fluoride	Acute	--	--	--	--	2000
Heptachlor	Human Health	.002	.002	--	.002	.002
Lead	Chronic	3	30	80	3	--
	Acute	80	200	750	80	50
Mercury (II)	Chronic	.05	.05	.25	.05	--
	Acute	6.5	6.5	10	2.5	2
	Human Health+	.15	.15	--	.15	--
Nitrate as NO3	Acute	--	--	--	--	45*
Nickel	Chronic	350	650	750	150	--
	Acute	3250	5800	7000	1400	--
	Human Health+	4584	4584	--	4584	607
Polychlorinated Biphenyles (PCBs)	Chronic	.014	.014	1	.014	--
	Acute	2	2	2	2	--
	Human Health	.0004	.0004	--	.0004	.0004
Polynuclear Aromatic Hydro- Carbons (PAHs)**	Chronic	.03	.03	3	.03	--
	Acute	30	30	30	30	--
	Human Health	.3	.3	--	.3	.028
Phenols	Chronic	50	50	50	50	--
	Acute	1000	2500	2500	1000	50
	Human Health+	300	300	--	300	--
Selenium (VI)	Chronic	10	125	125	70	--
	Acute	15	175	175	100	10
Silver	Chronic	2.5	8.5	8.5	.35	--
	Acute	30	100	100	4	50

Parameter		Use Designations B(CW)	B(WW)	B(LR)	B(LW)	C
Toluene	Chronic	50	50	150	50	--
	Acute	2500	2500	7500	2500	--
	Human Health+	300*	300*	--	300*	101*
Total Residual Chlorine (TRC)	Chronic	10	20	25	10	--
	Acute	35	35	40	20	--
1,1,1-Trichloroethane	Acute	--	--	--	--	200
	Human Health+	173*	173*	--	173*	--
Trichloroethylene (TCE)	Chronic	80	80	80	80	--
	Acute	4000	4000	4000	4000	5
	Human Health	807	807	--	807	--
Vinyl Chloride	Acute	--	--	--	--	2
	Human Health	5250	5250	--	5250	--
Zinc	Chronic	200	450	2000	100	--
	Acute	220	500	2200	110	1000
	Human Health+	5000	5000	--	5000	--

*expressed as milligrams/liter
**to include the sum of known and suspected carcinogenic PAHs
***expressed as nanograms/liter
+Represents the non-carcinogenic human health parameters.
++The concentrations of 4,4'- DDT or its metabolites; 4,4'- DDE and 4,4'- DDD, individually shall not exceed the human health criterion.

Table 2

Comparison Of Aquatic Life Criteria to Human Health Criteria

Condition	Parameters
1*.Human Health Criteria More Stringent than Aquatic Life Criteria (2)	Arsenic, PCB's
2*.Human Health Criteria With no EPA or DNR Aquatic Life Criteria (13)	Benzene, Carbon Tetrachloride, Chlorobenzene, 4,4'-DDT, para-dichlorobenzene, 3,3-dichlorobenzidine, 1,2-dichloroethane, 1,1-dichloroethylene, dieldrin, dioxin, heptachlor, 1,1,1-trichloroethane, vinyl chloride
3. Human Health Criteria Less Stringent than Aquatic Life Criteria (11)	Cadmium, Chlordane, Chromium, Copper, Mercury, Nickel, PAH's Phenols, TCE, Toluene, Zinc
4. Aquatic Life Criteria With no EPA Human Health Criteria (4)	Cyanide, Lead, Selenium, Silver

*Only item 1 and 2 parameters included in this assessment.

TABLE 3

PRESENT AND PROJECTED PERMIT LIMITATIONS FOR EACH FACILITY.

TYPE OF FACILITY	Average Arsenic Values			
	Present Limits		Project Limits	
	mg/l	lbs/d	mg/l	lbs/d
Machinery Manufacture	.27	.71	.39	.44
Industrial Pretreatment	.2	72	.0014	1.1
Metal Refinery	-	1.85	.0009	-
Veterinary Medicine Form.	.37	.7	.032	.067

TABLE 4

PROJECTED CONSTRUCTION COSTS FOR EACH FACILITY. SOME FACILITIES MAY NOT ACTUALLY HAVE THE NEED AS PROJECTED IN THIS ASSESSMENT.

TYPE OF FACILITY	DESIGN FLOW (mgd)	TOTAL ESTIMATED CONSTRUCTION COST, IN $ MILLION
FOR ARSENIC REMOVAL: Machinery Manufacture	0.207	0.72
Industrial Pretreatment	0.015	0.05
Metal Refinery	0.045	0.16
Veterinary Medicine Form.	0.387	1.35
TOTAL		$2.28 Million

mgd = million gallons per day

TABLE 5

PROJECTED ANNUAL COSTS FOR EACH FACILITY, OVER AND ABOVE CURRENT COSTS

TYPE OF FACILITY	ANNUAL COSTS TO ACHIEVE REQUIRED METAL REMOVAL	ANNUAL COSTS TO CONSTRUCT REQUIRED METAL REMOVAL FACILITY	TOTAL COSTS TO CONSTRUCT & TREAT METAL REMOVAL
ARSENIC REMOVAL: Mach. Manuf.	184,000	76,200	260,200
Metal Refinery	40,100	16,900	57,000
Indust. Pretreat.	13,100	5,300	18,400
Vet. Med. Form.	343,100	143,000	486,100
TOTAL	580,300	241,400	821,700
AN AVERAGE FACILITY'S ADDITIONAL COST:	145,000	50,300	205,400

Mr. Stokes distributed copies of a draft Estimated Economic Impacts and Benefits statement for these rules. He gave an explanation of the rules and the economic impacts statement. Mr. Stokes explained that the numbers listed in the human health criteria for Mercury, Phenol, and Toluene should be divided by 10 to get them down to the EPA criteria value. He noted that staff has been working with the Water Quality Standards Technical Advisory Committee on this rule and they have been provided copies of the rule.

Nancylee Siebenmann asked if the technical advisory committee is in agreement with these rules.

Mr. Stokes responded that there are no serious problems yet. The main issue of conversation was in applying the numbers for human health the same as for aquatic life. There was concern that the numbers built in an extra degree of conservatism in terms of how those numbers are translated into a permit limit.

Discussion followed regarding the health risk threshold of 1/100,000 and a higher incremental cost for no better degree of protection.

Motion was made by Margaret Prahl to approve Notice of Intended Action--Chapter 61, Water Quality Standards - Human Health Criteria. Seconded by Mike Earley. Motion carried unanimously.

PROPOSED RULE--CHAPTER 60, DIFINITIONS AND CHAPTER 62, FEDERAL EFFLUENT AND PRETREATMENT STANDARDS

Allan Stokes, Division Administrator, Environmental Protection Division, presented the following item.

The proposed rules update references to federal regulations in the Iowa Adminstrative Code. From time to time, EPA promulgates new or revised effluent and pretreatment standards applicable to some industries. These effluent and pretreatment standards are adopted by reference in Chapter 62 of the rules. Periodic updates of references to the federal standards are necessary because the effluent and pretreatment standards adopted by the Commission must be at least as stringent as those promulgated by EPA to maintain delegation of the department's NPDES program. However, the Iowa Code prohibits the Commission from adopting effluent and pretreatment standards more stringent than the federal standards. The Commission will be asked at its July meeting to approve the Notice of Intended Action and set a date for a public hearing to receive comments on the proposed rules.

(Rule is shown on the following 2 pages)

ENVIRONMENTAL PROTECTION COMMISSION [567]
Notice of Intended Action

Pursuant to the authority of Iowa Code section 455B.105 and 455B.173, the Environmental Protection Commission gives notice of intended action to amend 567--Chapter 62, "Effluent and Pretreatment Standards: Other Effluent Limits or Prohibitions," and 567--Chapter 60, "Scope of Title - Definitions - Forms - Rules of Practice". Iowa Administrative Code.

The purpose of the proposed rulemaking is to update references in rules 62.4 (455B) and 62.5 (455B) to federal effluent and pretreatment standards found in 40 Code of Federal Regulations (CFR) which need to be changed due to federal amendments and revisions to 40 CFR. The proposed change to rule 60.2 is to update the definition of "Act" to include amendments to the Water Pollution Control Act through December 31, 1989.

The effluent and pretreatment standards adopted by the Commission are required to be at least as stringent as the enumerated promulgated federal standards in order to have continued approval by the federal Environmental Protection Agency of the department's NPDES program. Iowa Code section 455B.173(3) requires that the effluent and pretreatment standards adopted by the commission not be more stringent than the enumerated promulgated federal standards.

Any interested person may submit written suggestions or comments on the proposed rule changes through _____. Such written materials should be directed to Steve Williams, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand Avenue, Des Moines, Iowa 50319-0034, Fax # 515/281-8895. Persons who have questions may contact Steve Williams at 515/281-8884. Persons are also invited to present oral or written comments at a public hearing which will be held on _____ at _____ a.m. in conference room 5 West, Wallace State Office Building, 900 East Grand, Des Moines, Iowa.

These rules may have an impact upon small businesses.

Copies of these proposed rules may be obtained from Sarah Detmer, Records Center, Iowa Department of Natural Resources, Wallace State Office Building, 900 East Grand, Des Moines, Iowa 50319-0034.

These rules are intended to implement Iowa Code Chapter 455B, Division III, Part I.

ITEM 1. Amend rule 567--62.4(455B) to read as follows:

567--62.4(455B) Federal effluent and pretreatment standards. The federal standards, 40 Code of Federal Regulations (CFR), revised as of July 1, ~~1986~~ 1989 are applicable to the following categories.

ITEM 2. Amend subrule 62.4(3) as follows:

62.4(3) General pretreatment regulations for existing and new sources of pollution. The following is adopted by reference: 40 CFR 403 ~~as amended on October 17, 1988 (53 FR 40562), and January 4, 1989 (54 FR 246)~~.

ITEM 3. Revise subrule 62.4(14) to read as follows:

62.4(14) Organic chemicals ~~manufacturing~~, plastics and synthetic fibers point source category. The following is adopted by reference: 40 CFR part 414.

ITEM 4. Revise subrule 62.4(16) as follows:

62.4(16) ~~Plastics and synthetics point source category. The following is adopted by reference: 40 CFR 416.~~ Reserved

ITEM 5. Amend subrule 62.4(67) as follows:

62.4(67) Aluminum forming point source category. The following is adopted by reference: 40 CFR part 467 ~~as amended on December 27, 1988 (53 FR 52366)~~.

ITEM 6. Revise subrule 62.4(71) as follows:

62.4(71) Nonferrous metals forming and metal powders. The following is adopted by reference: 40 CFR part 471 ~~(54 FR 11346)~~.

ITEM 7. Amend subrule 567--62.5(455B) to read as follows:

567--62.5(455B) Federal toxic effluent standards. The following is adopted by reference: 40 CFR part 129, revised as of July 1, ~~1986~~ 1989.

ITEM 8. Amend subrule 567--60.2(455B) to read as follows:

567--60.2(455B) Definitions. The following definitions apply to this title, unless otherwise specified in the particular chapter of this title:

"Act" means the Federal Water Pollution Control Act as amended through December 31, ~~1984~~ 1989, 33 U.S.C. §1251 et seq.

_____

Date

_____

Larry J. Wilson, Director

Mr. Stokes stated that this rule will conform our rules to some recent changes in federal regulations addressing pretreatment standards for certain categories of industries.

This was an informational item; no action was required.

PROPOSED CONTESTED CASE DECISION--ROBERT COPPINGER AND VELMA NEHMAN

Mike Murphy, Bureau Chief, Legal Services Bureau, presented the following item.

On August 16, 1989, the department denied an application for "401" certification filed by Robert Coppinger and Velma Nehman. On December 4, 1989, the department issued Flood Plain Permit Denial Number FP-89-238 to the same parties. Those actions, which involved the same parties, facts and issues, were appealed and the matter proceeded to administrative hearing on May 2 and 3, 1990. The Administrative Law Judge issued the attached Proposed Decision on May 17, 1990. The decision affirms the department's actions.

Either party may appeal the Proposed Decision to the Commission. In the absence of an appeal, the Commission may decide on its own motion to review the Proposed Decision. If there is no appeal or review of the Proposed Decision, it automatically becomes the final decision of the Commission.

Mr. Murphy briefed the Commission on the history of this case and noted that the Administrative Law Judge upheld the Fish and Wildlife Division's assessment in this case.

William Ehm inquired as to what is being done in regards to the downstream levy (Lennon).

Mr. Murphy stated that it involves a case currently in the courts and the matter is still pending. He added that Mr. Coppinger and Ms. Nehman are asserting that the department had written off a portion of a channel change in the Lennon case, and it should impact the department's decision in this case.

Discussion followed regarding statute of limitations on channel changes, and the department's policy on notification to landowners prior to inspection of property.

The Commission took no action; this has the effect of upholding the hearing officer's decision unless there is an appeal.

Clark Yeager mentioned that he would like more information on wetlands and 401 certification as Don Etler has written the Commissioners several letters regarding this subject.

Director Wilson indicated that staff will provide information to the Commission at a future meeting when Fish & Wildlife Division staff will be present to address the issue.

Mr. Wilson explained the CRP program and Don Etler's interpretation that a landowner cannot take their converted CRP land out of wetland status at the end of the program. He added that that is not the understanding of the DNR, the COE, or the U.S. F & W Service. Director Wilson noted that EPA seems to be "a little iffy" in wrote to EPA and asked for a clearer definition of the issue. The department is waiting for an answer to that letter.

Margaret Prahl suggested that a representative from USDA and ASCS be invited to speak on the provisions of Swampbuster and how it applies to wetlands.

PROPOSED CONTESTED CASE DECISION--RUTH ANN COE

Mike Murphy, Bureau Chief, Legal Services Bureau, presented the following item.

On December 20, 1989, the department issued Administrative Order 89-AQ-46/89-SW-39 to Ruth Ann Coe. That action required her to cease illegal open burning and solid waste disposal, to remove and properly dispose of solid waste, and to pay a $1,000.00 penalty. That action was appealed and the matter proceeded to administrative hearing on May 18, 1990. The hearing officer issued the attached Proposed Findings of Fact, Conclusions of Law, and Order on May 25, 1990. The decision affirms the Department's Order, with the exception of reducing the penalty to $800.00.

Either party may appeal the Proposed Decision to the Commission. In the absence of an appeal, the Commission may decide on its own motion to review the Proposed Decision. If there is no appeal or review of the Proposed Decision, it automatically becomes the final decision of the Commission.

Mr. Murphy briefed the Commission on the history of this case.

The Commission took no action; this has the effect of upholding the hearing officer's decision unless there is an appeal.

GENERAL DISCUSSCION ITEMS

The August meeting in Sioux City was discussed.

The Commission indicated they would like a review of the legislative items that did not pass in the last session.

Discussion took place in regards to the new recycling directory, recycling freon, and recycling grants.

ADDRESS ITEMS FOR NEXT MEETING

1. Wetlands
2. Legislation package
3. Groundwater cleanup risk analysis

RECESS

Chairperson Mohr recessed the meeting at 3:10 p.m., Monday, June 18, 1990.

MEETING RECONVENES 8:30 A.M., TUESDAY, JUNE 19, 1990

Mike Earley stated that he heard many positive comments last evening that people appreciated the Commission's efforts to leave Des Moines and to make themselves available to the public. They also appreciated the opportunity to meet and visit with DNR staff.

PUBLIC PARTICIPATION

Elaine Jaquith

Elaine Jaquith, Waterloo resident, addressed the Commission expressing her concerns over the need for more control of lawn care pesticides. She related that she has a bird sanctuary in her yard and she has noticed a number of dead birds after neighbors had their lawns sprayed with chemicals. Ms. Jaquith mentioned a number of people with whom she had had contact in regards to getting help in this matter, including local officials as well as several from the Department of Agriculture and Land Stewardship,

but no one has been able to do anything about it. She asked if there is anything the Commission can do to restrict application of these pesticides. Ms. Jaquith related that she needs the support and encouragement from EPC to her local government to restrict lawn care pesticides.

Allan Stokes stated that the labeling, licensing, and applicator certification of the pesticides would be under the jurisdiction of the Department of Agriculture and Land Stewardship at the state level. They would also have the enforcement authority for these programs. He stated that he is not aware of anything that would prohibit a city from adopting ordinances that would put more stringent limitations or extra requirements on application of lawn care pesticides.

Director Wilson stated that the Commission could send a letter to local officials. He also advised Ms. Jaquith that if there is any doubt in the City Attorney's mind as to whether they can or cannot issue a blanket prohibition on the use of pesticides, a request should be made for an opinion from the Attorney General's Office.

REFERRALS TO THE ATTORNEY GENERAL

Mike Murphy, Bureau Chief, Legal Services Bureau, presented the following item.

The Director requests the referral of the following to the Attorney General for appropriate legal action. Litigation reports have been provided to the Commissioners and are confidential pursuant to Iowa Code section 22.7(4).

Harvey Drewelow and Hanson Tire Service of New Hampton, Inc. (New Hampton) - solid waste/air pollution
Pete's Sunoco & Car Wash; Popejoy Septic Tank Service (Des Moines) - water pollution
63-I80 Truckstop/Moore Oil Co. (Malcom) - wastewater
Soo Line Railroad (Mason City) - tabled item; withdraw request

Harvey Drewelow and Hanson Tire Service of New Hampton, Inc.

Mr. Murphy stated that this case involves the improper disposal and burning of tires in Chickasaw County. Harvey Drewelow is the owner of the property where dumping of tires has occurred and Hanson Tire Service of New Hampton is also involved in this matter. Mr. Murphy stated that as a result of a complaint on March 5, 1990, the dump was investigated and it was noted there was a large amount of tire disposal along the streambank. In the course of investigating the matter to determine whose property it

was on, a fire was started at the location during the evening of March 11, 1990. Mr. Murphy circulated photos taken by the county sanitarian on March 12 showing that the fire was burning out and there were a number of tires that were unburned. When he went back on March 14, he noted that tires had been restacked and burned. Mr. Murhpy stated that Mr. Drewelow and Hanson Tire Service both deny any involvement in the burning. He added that referral is sought due to the fact that the dump existed and subsequent investigation indicated that Hanson Tire Service had some involvement in placing tires there, which enabled the fire to happen.

APPOINTMENT - JACK GORMAN (Hanson Tire Service referral)

Jack Gorman, Hanson Tire of New Hampton, explained that Hanson Tire is a name just like Firestone or Good Year and that none of the stores are related, they are individually owned. He related that he has been in the tire business since 1957, and in 1985 he switched to Good Year. Mr. Gorman stated that during that time he received verbal permission from Justin Underwood, then owner of the involved property, to dump tires there. Mr. Gorman noted that Mr. Drewelow purchased the property two years ago and asked him not to dump tires there anymore, and so he immediately stopped. He related that other tire dealers in the area were also dumping tires on the property. Mr. Gorman stated that during the investigation in March the tires that were pulled out had retread tags on them and they referred the whole deal to him. He stated that he and Mr. Drewelow have cleaned up the area and planted some trees and he circulated photos showing same.

APPOINTMENT - HARVEY DREWELOW

Harvey Drewelow, owner of property where dumping occurred, stated that the tires were on the property when he bought it. He noted that individuals other than Mr. Gorman have dumped there, and one time he caught them and made them remove the tires. Mr. Drewelow explained that in March when someone burnt the tires he installed gates so people can no longer get in the area. He related that he had the area cleaned up after the fire, and he circulated two bills showing some cleanup costs. Mr. Drewelow stated that he did not burn the tires and he does not know who did.

Chairperson Mohr asked if the tires were there when he purchased the property.

Mr. Drewelow responded that 95% of the tires were there at that time and he had intentions to haul them out.

Mike Earley asked if Mr. Drewelow contact other tire dealers around the community to notify them to quit dumping there.

Mr. Drewelow stated that Jack Hanson was the only dealer he notified not to dump tires anymore.

Margaret Prahl asked why Mr. Drewelow did not clean up the area in the year and a half before this issue came up.

Mr. Drewelow stated that he was short on money and thought he would get someone throughout the next summer to haul them out with a semi.

William Ehm stated that it is ironic that these tires were there for five years, and then six days after the investigation by the county sanitarian there was a fire.

Mr. Drewelow remarked that he did not know the county sanitarian was making an investigation on March 5. He added that his first contact from the department was after the fire and he wasn't even aware there was a problem.

Motion was made by Mike Earley for referral to the Attorney General's Office. Seconded by William Ehm.

Motion was made by Clark Yeager to go into closed session pursuant to Iowa Code Section 21.5(1)c to discuss strategy with counsel in matters that are in actual or potential litigation where its disclosure would be likely to prejudice the position of the governmental body in that litigation. Seconded by William Ehm.

Chairperson Mohr requested a roll call vote. "Aye" vote was cast by Commissioners Earley, Ehm, Prahl, Siebenmann, Yeager, and Mohr. Motion carried unanimously.

Motion was made by Margaret Prahl to adjourn closed session and return to open session. Seconded by Clark Yeager.

Chairperson Mohr requested a roll call vote. "Aye" vote was cast by Commissioners Earley, Ehm, Prahl, Siebenmann, Yeager, and Mohr. Motion carried unanimously.

Margaret Prahl moved that the motion to refer be amended to reduce the proposed penalty by 50% unless the Attorney General's Office is able to develop evidence of culpability for starting or permitting and abetting continuation of the fire, in which case the penalty would continue as originally proposed. Seconded by Nancylee Siebenmann.

Chairperson Mohr requested a roll call vote. "Aye" vote was cast by Commissioners Ehm, Prahl, Siebenmann, Yeager, and Mohr. "Nay" vote was cast by Commissioner Earley. Motion carried on a vote of 5-Aye to 1-Nay.

Vote on Commissioner Earley's motion to refer this case to the Attorney General carried unanimously.

63-I80 Truckstop-Moore Oil Co.

Mr. Murphy stated that this referral involves the failure to either perform the required monitoring or to submit monitoring reports in a timely manner and a few operational deficiencies at the facility. He expanded on these issues. The Administrative Order which was issued in 1988 required them to submit timely and complete monitoring reports regarding their wastewater facility. Mr. Murphy noted that about a year ago this matter was referred because they were having trouble meeting discharge limits and their facilities were inadequate. They were under Administrtive Order to make improvments in that area and were not doing so in a timely manner.

Discussion followed regarding whether or not staff can deny a permit due to non-compliance on reporting.

Mr. Murphy stated that the department does not normally use the permit process as an enforcement tool.

APPOINTMENT - RON MOORE

Ron Moore, owner of Moore Oil Company, addressed the Commission stating that when he previously appeared before the Commission it was suggested that he become more knowledgeable about monitoring and reporting requirements. He related that he learned the reason the lagoon was not meeting the permit limitations was that the person taking samples was taking them from the influent rather than the effluent. After hiring an engineer to analyze the situation, he and the engineer took five samples, four of which came in well below the BOD requirements. He related that because DNR was using a sample taken from the wrong end of the lagoon they chose to ignore the four good samples. He stated that he spent $30,000 to install new equipment required by DNR. Mr. Moore explained that the required reports have been placed as a top priority with his staff, and the person responsible for sending them signed a statement that she had sent them in. He added that in March his employee had a personal problem and did not get the report sent. He noted that he is now sending them certified so he can have a receipt for same.

Motion was made by Mike Earley for referral to the Attorney General's Office. Second by Margaret Prahl. Motion carried unanimously.

Pete's Sunoco & Car Wash; Popejoy Septic Tank Service

Popejoy Septic Tank Service Mr. Murphy informed the Commission that someone from the office of the lawyer representing Popejoy Septic Tank had called thismorni was a death in his family and they won't be able to attend the meeting today, and he asked that this matter be delayed until a later date. Mr. Murphy stated that he indicated to Popejoy's lawyer that this information and request would be communicated to the Commission. Mr. Murhpy indicated that he feels it should go forward to the Attorney General because there were more parties were factual discrepancies that needed investigation by the Attorney General. Mr. Murphy distributed copies of a letter that he received from Mr. Creger's counsel stating his case and he asked that the Commission consider this material in their decision.

Mr. Muprhy stated that this matter involves a spill of oil contaminated water into Walnut Creek, which is a tributary to the Raccoon River.

The oil originated from Pete's Sunoco and Car Wash and occurred as a result of the pumping out of sump tanks at the car wash. Mr. Creger has been very cooperative in providing information and in helping to halt the spread of contamination, and also with cleanup. Mr. Creger, owner of Pete's Sunoco and Car Wash, had retained Popejoy Septic Tank Service to clean out his sump tanks, and in the process of doing it they pumped the top portion (liquids) out into the storm sewer. Mr. Murphy stated that staff did not get any cooperation from Popejoy Septic Tank Service in responding to the incident. He added that Popejoy has sent a letter indicating that they are in deep financial difficulty. Also, that the incident occurred as a result of an unauthorized person who rented their truck and acted as an independent contractor. Mr. Murphy noted that the person is known as Doug Brower or Doug Brown and he has not been located at this time. Mr. Murphy pointed out a number of factual discrepancies in this case and stated that staff would recommend referral for further investigation.

Discussion followed.

Motion was made by Margaret Prahl for referral to the Attorney General's Office. Seconded by Mike Earley. Motion carried unanimously.

Soo Line Railroad

Mr. Murphy stated that he is not aware of any official action taken on this case; it was brought before the Commission and tabled and remains on the table at this time. He added that

staff is recommending withdrawal of the referral as they have worked out an agreement.
Motion was made by William Ehm to remove Soo Line Railroad from the table. Seconded by Margaret Prahl. Motion carried unanimously.

Motion was made by Margaret Prahl to accept staff's recommendation that the Soo Line Railroad referral be withdrawn. Seconded by William Ehm. Motion carried unanimously.

ADJOURNMENT

With no further business to come before the Environmental Protection Commission, Chairperson Mohr adjourned the meeting at 10:40 a.m., Tuesday, June 19, 1990.

Larry J. Wilson, Director

Nancylee Siebenmann, Secretary

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